BEFORE THE DEPARTMENT OF
NATURAL RESOURCES AND CONSERVATION
OF THE STATE OF MONTANA

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COMBINED APPLICATION FOR BENEFICIAL WATER USE PERMIT NO. 41F 30070321 AND CHANGE 41F 30070322 BY MT MOONLIGHT BASIN WATER & SEWER LLC	**)**	**PRELIMINARY DETERMINATION TO GRANT COMBINED APPLICATION**

On July 29, 2014, MT Moonlight Basin Water & Sewer (Applicant) submitted a Combined Application for Beneficial Water Use Permit No. 41F 30070321 and Change 41F 30070322 to the Bozeman Water Resources Office of the Department of Natural Resources and Conservation (Department or DNRC) for a Permit to appropriate up to a combined 405 gallons per minute (GPM) and 274.9 acre-feet (AF) per year of water from six wells and for a Change Authorization to retire acreage from the Braxton Ranch in order to mitigate depletions to Jack Creek, tributary to the Madison River. The Department published receipt of the Application on its website. The Application was determined to be correct and complete as of January 23, 2015.

The Department met with the Applicant, represented by Kevin Germain of Lone Mountain Land Company, and their consultant, Pat Eller of Morrison-Maierle, on December 23, 2014; January 23, 2015; February 3, 2015; and March 13, 2020, to discuss these Applications and the Technical Reports. The Applicant requested additional time to provide information through correspondence dated January 27, 2015. The Applicant submitted a waiver of the timelines in § 85-2-307, MCA, on March 3, 2015. The Applicant submitted additional information and a minor amendment to the Applications on April 1, 2020. This included a Consent to Approval, signed by Montana Fish, Wildlife, and Parks (FWP) Director Martha Williams, and a third-party agreement the Applicant entered into with MT FWP. Based on the additional information submitted, the Applications were determined to be correct and complete as of November 12, 2020, and revised Technical Reports were issued. The Applicant identified minor errors in the Technical Reports in a December 18, 2020, email. These errors were corrected in December 22, 2020, versions of the Technical Reports. An Environmental Assessment for this Application was completed on March 9, 2021.

INFORMATION

The Department considered the following information submitted by the Applicant.

Application as Filed:

- Form 600 GW: Groundwater Application for Beneficial Water Use Permit
- Pre-Application Meeting Form, dated 7/26/2013 (expired)
- Map 1 (GW.3) – ATA.2.MAP – Water Rights Application Well Locations
- Map 2 (GW.3) – GW.3.MAP – Water Rights Application Future Water System Layout
- Form 600-ATA: Aquifer Testing Addendum
- Letter from Troy Benn (Department) to Pat Eller (Morrison-Maierle) regarding the adequacy of completed aquifer tests, dated 10/17/2012
- Form 600-BCA: Basin Closure Area Addendum
- Form 600-HRA: Hydrogeologic Assessment Report Addendum
- "Technical Memorandum – Hydrogeologic Assessment Report Addendum, Moonlight Basin Public Water Supply Wells" from Morrison-Maierle
- Form 606 IR: Application to Change an Existing Irrigation Water Right
- Attachment IR.1.C.a: April 8, 2011, Statement of Opinion 41F 30031144, addressing a previous change of the irrigation water rights
- Attachment IR.1.D.a: Braxton Ranch Water Rights Purchase Agreement
- Map IR.2.1: Figure 3. Project Location and P.O.D. Map
- Map IR.2.2: Figure 4: Proposed Retired Acreage Total = 127 Acres
- Attachment IR.3.A.a: "Application to Change Existing Water Rights for Use in a Mitigation Plan for Treeline Springs, LLC Permit Application 30013630-41H"
- Form 606 HUA: Historical Water Use Addenda 41F 14211, 41F 15336, 41F 15345, 41F 15348 (four addenda, one per water right)
- Form 606-IFA: Change to Instream Flow Addendum
- Form 606-PA: Change in Purpose Addendum
- Document titled "Mitigation Plan as Required by MCA 85-2-362"

Information Received after Application Filed

- Form 633 for well 2010-3 (TH-10), received from Kevin Germain via email on 12/10/2014

- Form 633 for wells 2010-3 (TH-10); 2010-4 (TH-9); 2010-5 (TH-8); 2010-7 (TH-13); 2007-4; 2008-6 (Haggerty well); received 12/16/2014
- Well logs for wells 2010-3 (TH-10); 2010-4 (TH-9); 2010-5 (TH-8); 2010-7 (TH-13); 2007-4; received 10/12/2012. Note: No well log is available for well 2008-6.
- Letter from Pat Eller (Morrison-Maierle) to Department, "Moonlight Basin Ranch Aquifer Testing Variance Request," dated 12/29/2014.
- Letter from Department to MT Moonlight Basin Water & Sewer LLC granting variance request, dated 1/16/2015.
- Letter from Department to MT Moonlight Basin Water & Sewer LLC, discussing concerns related to draft Technical Reports, dated January 14, 2015
- Response to concerns letter from Morrison-Maierle to Department, dated 1/23/2015
- Evidence that a DEQ permit (HB41, § 85-2-362, MCA) is not required. Letter from Pat Eller (Morrison-Maierle) to Department, dated 1/23/2015
- "Second Response to 1/14/15 DNRC Letter on MT Moonlight Basin Water and Sewer GW Permit Application 41F 30070321 and Change Application 41F 30070322," letter and memorandum from Applicant and Morrison-Maierle to Department, received April 1, 2020
- "Technical Document review Applications 41F 30070321 and 41F 30070322," email from Morrison-Maierle to Department, identifying minor corrections required in Technical Reports

<u>Information within the Department's Possession/Knowledge</u>

- Aquifer Test Report, dated 1/13/2015 (superseded)
- Depletion Report, dated 1/13/2015
- Groundwater Permit Application Technical Report, dated 1/23/2015 (superseded)
- Irrigation Change Application Technical Report, dated 1/20/2015 (superseded)
- Revised Groundwater Permit Application Technical Report, dated 11/12/2020 (superseded)
- Revised Irrigation Change Application Technical Report, dated 11/12/2020 (superseded)
- Revised Aquifer Test Report, dated 7/14/2020
- Corrected Groundwater Permit Application Technical Report, dated 12/21/2020
- Corrected Irrigation Change Application Technical Report, dated 12/21/2020

- 1954 Madison County Water Resources Survey
- USGS flow rate records for Jack Creek near Ennis MT (station number 06040300) from 1973 – 1992
- USGS flow rate records for Madison River near Cameron MT (station number 06040000) from 1951 – 2020

The Department also routinely considers the following information. The following information is not included in the administrative file for this Application but is available upon request. Please contact the Bozeman Regional Office at 406-586-3136 to request copies of the following documents.

- Historic Diverted Volume Methodology Memorandum
- Consumptive Use Methodology Memorandum
- Return Flow Memorandum

The Department has fully reviewed and considered the evidence and argument submitted in this Application and preliminarily determines the following pursuant to the Montana Water Use Act (Title 85, chapter 2, parts 3 and 4, MCA).

BASIN CLOSURE

FINDINGS OF FACT

1. This permit application is for groundwater. This Application is located within the Jefferson-Madison River Basin Legislative Closure, which was closed effective April 1, 1993.

2. The Applicant submitted a hydrogeologic assessment determined to be correct and complete.

CONCLUSIONS OF LAW

3. The Department may not grant an application for a permit to appropriate water or for a reservation to reserve water within the Jefferson River Basin or the Madison River Basin until the final decrees have been issued in accordance with Title 85, Chapter 2, Part 2, MCA, pursuant to §85-2-341(1), MCA. The Jefferson River basin is the drainage area of the Jefferson River and its tributaries above the confluence of the Jefferson and Madison Rivers. The Madison River basin is the drainage area of the Madison River and its tributaries above the

confluence of the Madison and Jefferson Rivers. The proposed wells are located within the Jefferson-Madison River Basin Legislative Closure. This application is for groundwater and included a hydrogeologic assessment determined to be correct and complete. The application falls under the exceptions for the basin closure, §85-2-341, MCA.

4. Pursuant to § 85-2-360, MCA, a combined application for new appropriations of groundwater in a closed basin shall consist of a hydrogeologic assessment with an analysis of net depletion, a mitigation plan or aquifer recharge plan if required, an application for a beneficial water use permit or permits, and an application for a change in appropriation right or rights if necessary. A combined application must be reviewed as a single unit. A beneficial water use permit may not be granted unless the accompanying application for a change in water right is also granted. A denial of either results in a denial of the combined application. § 85-2-363, MCA. ARM 36.12.120. E.g., *In the Matter of Application No. 76H-30046211 for a Beneficial Water Use Permit and Application No.76H-30046210 to Change a Non-filed Water Right by Patricia Skergan and Jim Helmer* (DNRC Final Order 2010, Combined Application)(combined application under §85-2-363, MCA, reviewed as a single unit).

5. In reviewing an application for groundwater in a closed basin, the District Court in Sitz Ranch v. DNRC observed:

> The basin from which applicants wish to pump water is closed to further appropriations by the legislature. The tasks before an applicant to become eligible for an exception are daunting. The legislature set out the criteria discussed above (§ 85-2-311, MCA) and placed the burden of proof squarely on the applicant. The Supreme Court has instructed that those burdens are exacting. It is inescapable that an applicant to appropriate water in a closed basin must withstand strict scrutiny of each of the legislatively required factors.

Sitz Ranch v. DNRC, DV-10-13390, Montana Fifth Judicial District Court, *Order Affirming DNRC Decision*, (2011) Pg. 7.

6. A basin closure exception does not relieve the Department of analyzing § 85-2-311, MCA criteria. Qualification under a basin closure exception allows the Department to accept an application for processing. The Applicant must still prove the requisite criteria. E.g., *In The Matter of Application for Beneficial Water Use Permit No. 41K-30043385 by Marc E. Lee* (DNRC Final Order 2011); *In The Matter of Application for Beneficial Water Use Permit No. 41K-30045713 by Nicholas D. Konen*, (DNRC Final Order 2011)

§ 85-2-311, MCA, BENEFICIAL WATER USE PERMIT CRITERIA

GENERAL CONCLUSIONS OF LAW

7. The Montana Constitution expressly recognizes in relevant part that:

> (1) All existing rights to the use of any waters for any useful or beneficial purpose are hereby recognized and confirmed.
> (2) The use of all water that is now or may hereafter be appropriated for sale, rent, distribution, or other beneficial use . . . shall be held to be a public use.
> (3) All surface, underground, flood, and atmospheric waters within the boundaries of the state are the property of the state for the use of its people and are subject to appropriation for beneficial uses as provided by law.

Mont. Const. Art. IX, §3. While the Montana Constitution recognizes the need to protect senior appropriators, it also recognizes a policy to promote the development and use of the waters of the state by the public. This policy is further expressly recognized in the water policy adopted by the Legislature codified at § 85-2-102, MCA, which states in relevant part:

> (1) Pursuant to Article IX of the Montana constitution, the legislature declares that any use of water is a public use and that the waters within the state are the property of the state for the use of its people and are subject to appropriation for beneficial uses as provided in this chapter. . . .
> (3) It is the policy of this state and a purpose of this chapter to encourage the wise use of the state's water resources by making them available for appropriation consistent with this chapter and to provide for the wise utilization, development, and conservation of the waters of the state for the maximum benefit of its people with the least possible degradation of the natural aquatic ecosystems. In pursuit of this policy, the state encourages the development of facilities that store and conserve waters for beneficial use, for the maximization of the use of those waters in Montana . . .

8. Pursuant to § 85-2-302(1), MCA, except as provided in §§ 85-2-306 and 85-2-369, MCA, a person may not appropriate water or commence construction of diversion, impoundment, withdrawal, or related distribution works except by applying for and receiving a permit from the Department. See § 85-2-102(1), MCA. An applicant in a beneficial water use permit proceeding must affirmatively prove all of the applicable criteria in § 85-2-311, MCA. Section § 85-2-311(1) states in relevant part:

> … the department shall issue a permit if the applicant proves by a preponderance of evidence that the following criteria are met:
> (a) (i) there is water physically available at the proposed point of diversion in the amount that the applicant seeks to appropriate; and
> (ii) water can reasonably be considered legally available during the period in which the applicant seeks to appropriate, in the amount requested, based on the records of the

department and other evidence provided to the department. Legal availability is determined using an analysis involving the following factors:

(A) identification of physical water availability;

(B) identification of existing legal demands on the source of supply throughout the area of potential impact by the proposed use; and

(C) analysis of the evidence on physical water availability and the existing legal demands, including but not limited to a comparison of the physical water supply at the proposed point of diversion with the existing legal demands on the supply of water.

(b) the water rights of a prior appropriator under an existing water right, a certificate, a permit, or a state water reservation will not be adversely affected. In this subsection (1)(b), adverse effect must be determined based on a consideration of an applicant's plan for the exercise of the permit that demonstrates that the applicant's use of the water will be controlled so the water right of a prior appropriator will be satisfied;

(c) the proposed means of diversion, construction, and operation of the appropriation works are adequate;

(d) the proposed use of water is a beneficial use;

(e) the applicant has a possessory interest or the written consent of the person with the possessory interest in the property where the water is to be put to beneficial use, or if the proposed use has a point of diversion, conveyance, or place of use on national forest system lands, the applicant has any written special use authorization required by federal law to occupy, use, or traverse national forest system lands for the purpose of diversion, impoundment, storage, transportation, withdrawal, use, or distribution of water under the permit;

(f) the water quality of a prior appropriator will not be adversely affected;

(g) the proposed use will be substantially in accordance with the classification of water set for the source of supply pursuant to 75-5-301(1); and

(h) the ability of a discharge permitholder to satisfy effluent limitations of a permit issued in accordance with Title 75, chapter 5, part 4, will not be adversely affected.

(2) The applicant is required to prove that the criteria in subsections (1)(f) through (1)(h) have been met only if a valid objection is filed. A valid objection must contain substantial credible information establishing to the satisfaction of the department that the criteria in subsection (1)(f), (1)(g), or (1)(h), as applicable, may not be met. For the criteria set forth in subsection (1)(g), only the department of environmental quality or a local water quality district established under Title 7, chapter 13, part 45, may file a valid objection.

To meet the preponderance of evidence standard, “the applicant, in addition to other evidence demonstrating that the criteria of subsection (1) have been met, shall submit hydrologic or other evidence, including but not limited to water supply data, field reports, and other information developed by the applicant, the department, the U.S. geological survey, or the U.S. natural resources conservation service and other specific field studies.” § 85-2-311(5), MCA (emphasis added). The determination of whether an application has satisfied the § 85-2-311, MCA criteria is committed to the discretion of the Department. Bostwick Properties, Inc. v. Montana Dept. of Natural Resources and Conservation, 2009 MT 181, ¶ 21. The Department is required to grant

a permit only if the § 85-2-311, MCA, criteria are proven by the applicant by a preponderance of the evidence. Id. A preponderance of evidence is "more probably than not." Hohenlohe v. DNRC, 2010 MT 203, ¶¶ 33, 35.

9. Pursuant to § 85-2-312, MCA, the Department may condition permits as it deems necessary to meet the statutory criteria:

> (1) (a) The department may issue a permit for less than the amount of water requested, but may not issue a permit for more water than is requested or than can be beneficially used without waste for the purpose stated in the application. The department may require modification of plans and specifications for the appropriation or related diversion or construction. The department may issue a permit subject to terms, conditions, restrictions, and limitations it considers necessary to satisfy the criteria listed in 85-2-311 and subject to subsection (1)(b), and it may issue temporary or seasonal permits. A permit must be issued subject to existing rights and any final determination of those rights made under this chapter.

E.g., Montana Power Co. v. Carey (1984), 211 Mont. 91, 96, 685 P.2d 336, 339 (requirement to grant applications as applied for, would result in, "uncontrolled development of a valuable natural resource" which "contradicts the spirit and purpose underlying the Water Use Act."); see also, *In the Matter of Application for Beneficial Water Use Permit No. 65779-76M by Barbara L. Sowers* (DNRC Final Order 1988)(conditions in stipulations may be included if in further compliance with statutory criteria); *In the Matter of Application for Beneficial Water Use Permit No. 42M-80600 and Application for Change of Appropriation Water Right No. 42M-036242 by Donald H. Wyrick* (DNRC Final Order 1994); Admin R. Mont. (ARM) 36.12.207.

10. The Montana Supreme Court further recognized in Matter of Beneficial Water Use Permit Numbers 66459-76L, Ciotti: 64988-G76L, Starner (1996), 278 Mont. 50, 60-61, 923 P.2d 1073, 1079, 1080, *superseded by legislation on another issue*:

> Nothing in that section [85-2-313], however, relieves an applicant of his burden to meet the statutory requirements of § 85-2-311, MCA, before DNRC may issue that provisional permit. Instead of resolving doubts in favor of appropriation, the Montana Water Use Act requires an applicant to make explicit statutory showings that there are unappropriated waters in the source of supply, that the water rights of a prior appropriator will not be adversely affected, and that the proposed use will not unreasonably interfere with a planned use for which water has been reserved.

See also, Wesmont Developers v. DNRC, CDV-2009-823, Montana First Judicial District Court, *Memorandum and Order* (2011). The Supreme Court likewise explained that:

> .... unambiguous language of the legislature promotes the understanding that the Water Use Act was designed to protect senior water rights holders from encroachment by junior appropriators adversely affecting those senior rights.

Montana Power Co., 211 Mont. at 97-98, 685 P.2d at 340; see also Mont. Const. art. IX §3(1).

11. An appropriation, diversion, impoundment, use, restraint, or attempted appropriation, diversion, impoundment, use, or restraint contrary to the provisions of § 85-2-311, MCA is invalid. An officer, agent, agency, or employee of the state may not knowingly permit, aid, or assist in any manner an unauthorized appropriation, diversion, impoundment, use, or other restraint. A person or corporation may not, directly or indirectly, personally or through an agent, officer, or employee, attempt to appropriate, divert, impound, use, or otherwise restrain or control waters within the boundaries of this state except in accordance with this § 85-2-311, MCA. § 85-2-311(6), MCA.

12. The Department may take notice of judicially cognizable facts and generally recognized technical or scientific facts within the Department's specialized knowledge, as specifically identified in this document. ARM 36.12.221(4).

PROPOSED APPROPRIATION
BENEFICIAL WATER USE PERMIT NO. 41F 30070321

FINDINGS OF FACT

13. The Applicant proposes to divert water from groundwater, tributary to Lone and Jack Creeks, by means of six wells with depths ranging from 250 to 706 feet below ground surface (bgs) from January 1 to December 31 with a combined flow rate of up to 405 gallons per minute (GPM) not to exceed 274.9 acre-feet (AF) of diverted volume for year-round municipal use. The Applicant proposes to use 233.8 AF of diverted volume for in-home domestic use and commercial use, and to use 41.1 AF of diverted volume to irrigate 28.94 acres of lawn and garden. Domestic effluent water will be treated and then land-applied to the golf course or other suitable areas. Table 1 summarizes the six points of diversion.

Table 1: Points of Diversion

Well Name	GWIC	Qtr	Section	Twp	Rge	County
Well # 2010-3	259359	NESESE	15	6 S	2 E	Madison
Well # 2010-4	259357	NESWNE	15	6 S	2 E	Madison
Well # 2010-5	259699	SWSWSE	15	6 S	2 E	Madison
Well # 2010-7	259361	SWNWNW	15	6 S	2 E	Madison
Well # 2008-6	288206	SENWSW	22	6 S	2 E	Madison
Well # 2007-4	279080	NWSENE	23	6 S	2 E	Madison

Table 2 summarizes the place of use.

Table 2: Place of Use

ID	1/4	1/4	Sec	Twp	N/S	Rge	E/W	County
1	W2	SW	1	6	S	2	E	Madison
2	E2	NE	2	6	S	2	E	Madison
3	E2	NE	3	6	S	2	E	Madison
4	E2	SE	3	6	S	2	E	Madison
5		E2	9	6	S	2	E	Madison
6		SW	10	6	S	2	E	Madison
7		SE	10	6	S	2	E	Madison
8		NE	10	6	S	2	E	Madison
9			11	6	S	2	E	Madison
10		SW	12	6	S	2	E	Madison
11		NW	12	6	S	2	E	Madison
12	SW	NE	12	6	S	2	E	Madison
13	W2	SE	12	6	S	2	E	Madison
14			13	6	S	2	E	Madison
15			14	6	S	2	E	Madison
16			15	6	S	2	E	Madison
17	NE	NE	16	6	S	2	E	Madison
18			22	6	S	2	E	Madison
19			23	6	S	2	E	Madison
20			24	6	S	2	E	Madison
21		N2	26	6	S	2	E	Madison

14. This application is for groundwater. The appropriation is located near the lower reaches of Lone Creek and the upper reaches of Jack Creek, tributary to the Madison River.

15. The total consumption under this permit is 155.77 AF. At equilibrium, depletion to surface waters will equal consumption. Three components comprise the total consumption – full calculations are shown in the Depletion Report and the Technical Report, but summaries are reproduced here:

- Indoor domestic/commercial: 5 percent of 233.80 AF = 11.69 AF
    - Remaining 233.80 – 11.69 = 222.11 AF wastewater effluent
    - Land application of 221.11 AF effluent on 111.06 acres, based on 12.35 inches net irrigation water requirements (IWR) for Hebgen Dam weather station: 12.35 inches / 12 inches per foot x 111.06 acres = 114.30 AF consumed. Land application will be conducted at twice the agronomic rate of consumption.
- Lawn and garden irrigation of 28.94 acres, at 12.35 inches IWR: 28.94 acres x 12.35 inches / 12 inches per foot = 29.78 AF
- Total consumption = 11.69 (indoor domestic) + 114.30 (land application of domestic wastewater) + 29.78 AF (lawn and garden irrigation) = 155.77 AF total consumption

16. This permit would be supplemental to the other municipal-type permits owned by the Applicant. These existing permits are 41H 99524-00, 41H 30005212, and 41F 30013630. The amount of water requested under the present permit 41F 30070321 was calculated by comparing the ultimate demand of Moonlight Resort at full build-out and comparing it to their existing water rights. This is discussed in more detail in the Beneficial Use Section of this document.

17. On December 29, 2014, the Applicant, through its consultant Morrison-Maierle, requested a variance from the Aquifer Testing Requirements in ARM 36.12.121(3)(a), which states that “[p]umping must be maintained at a constant discharge rate equal to or greater than the proposed pumping rate for the entire duration of the test.” In this application, the Applicant is requesting a total flow rate of 405 GPM from six separate wells. Each well was tested at a flow rate equal to or greater than its design rate, and the sum of the tested flow rates exceeds the total requested flow rate. The Applicant requested that the Department grant a variance for which their total requested flow rate was the sum of the tested flow rates. The Department

granted this request with a variance dated January 16, 2015. Table 3 shows the flow rate breakdown by well.

Table 3: Well Flow Rates

Well ID	Tested Flow Rate	Design Flow Rate
(-)	(GPM)	(GPM)
2007-4	200	100
2008-6	45	30
2010-3	45	30
2010-4	100	65
2010-5	50	30
2010-7	150	150
SUM =	590	405

18. The following conditions are proposed for Permit 41F 30070321. Each condition is analyzed in detail in the corresponding section of this document.

IMPORTANT INFORMATION – MITIGATION REQUIRED
THE APPROPRIATOR'S USE OF WATER UNDER THIS PERMIT IS CONDITIONED UPON THE 155.77 AC-FT OF MITIGATION VOLUME REQUIRED TO OFFSET ADVERSE EFFECTS FROM NET DEPLETION TO JACK CREEK. DIVERSION UNDER THIS PERMIT MAY NOT COMMENCE UNTIL THE MITIGATION PLAN AS SPECIFICALLY DESCRIBED AND APPROVED THROUGH CHANGE AUTHORIZATION 41F 30070322 IS LEGALLY IMPLEMENTED. DIVERSION UNDER THIS PERMIT, EXCEPT FOR EMERGENCY USE, MUST STOP IF MITIGATION AS HEREIN REQUIRED IN AMOUNT, LOCATION, AND DURATION CEASES.

WATER MEASUREMENT-INLINE FLOW METER REQUIRED
THE APPROPRIATOR SHALL INSTALL A DEPARTMENT APPROVED IN-LINE FLOW METER AT A POINT IN THE DELIVERY LINE APPROVED BY THE DEPARTMENT. WATER MUST NOT BE DIVERTED UNTIL THE REQUIRED MEASURING DEVICE IS IN PLACE AND OPERATING. ON A FORM PROVIDED BY THE DEPARTMENT, THE APPROPRIATOR SHALL KEEP A WRITTEN MONTHLY RECORD OF THE FLOW RATE AND VOLUME OF ALL WATER DIVERTED, INCLUDING THE PERIOD OF TIME. RECORDS SHALL BE SUBMITTED BY NOVEMBER 30 OF EACH YEAR AND UPON REQUEST AT OTHER TIMES DURING THE YEAR. FAILURE TO SUBMIT REPORTS MAY BE CAUSE FOR REVOCATION OF A PERMIT OR CHANGE. THE RECORDS MUST BE SENT TO THE WATER RESOURCES REGIONAL OFFICE. THE APPROPRIATOR SHALL MAINTAIN THE MEASURING DEVICE SO IT ALWAYS OPERATES PROPERLY AND MEASURES FLOW RATE AND VOLUME ACCURATELY.

Physical Availability

FINDINGS OF FACT

19. The Department's Revised Aquifer Test Report analyzed physical groundwater availability by calculating the groundwater flux through a zone of influence based on the 0.01-foot drawdown contour. This contour extended past the aquifer boundaries of the Big Sky structural block, so it was truncated to 28,000 feet, which is the width perpendicular to the direction of groundwater flow. The groundwater flux through the zone of influence was computed as 4,270 AF per annum. Groundwater is physically available in the amount requested.

20. The Department's Revised Aquifer Test Report calculated drawdown in the six wells and the remaining water column. The Department analyzed drawdown using the Cooper-Jacob (1946) and Theis (1935) solutions. For the six wells, the Department's modeling predicted total drawdown ranging from 73.1 feet to 213.5 feet. All wells had more than 100 feet of predicted remaining available water column, except for well 2008-6, for which the Department's modeling predicted 3.3 feet of remaining water column. The Applicant's consultant, Morrison-Maierle, provided additional information about the pumping rates and an alternative analysis for well 2008-6. As explained in the April 2020 Morrison-Maierle memorandum, "[c]onstruction of well 2008-6 was halted prior to completion" due to "economic constraints" resulting from the "Lehman Brothers bankruptcy proceedings." Since this well was not completed as designed, it will be redeveloped to increase yield as the water system is built out. Currently, Morrison-Maierle reports that it is capable of sustaining 30 GPM. The six wells have adequate physical availability, as evidenced by the remaining water column after drawdown.

CONCLUSIONS OF LAW

21. Pursuant to § 85-2-311(1)(a) (i), MCA, an applicant must prove by a preponderance of the evidence that "there is water physically available at the proposed point of diversion in the amount that the applicant seeks to appropriate."

22. An applicant must prove that at least in some years there is water physically available at the point of diversion in the amount the applicant seeks to appropriate. In the Matter of Application for Beneficial Water Use Permit No. 72662s76G by John Fee and Don Carlson (DNRC Final Order 1990); In the Matter of Application for Beneficial Water Use Permit No. 85184s76F by Wills Cattle Co. and Ed McLean (DNRC Final Order 1994).

23. Applicant must prove that water is physically available on a year-around basis for application requesting a period of use from January 1 through December 31. In The Matter Of Application For Beneficial Water Use Permit No. 41K 30022398 By James L Hadley (DNRC Final Order 2008)(summer flow data only is not sufficient).

24. The Applicant has proven that water is physically available at the proposed point of diversion in the amount Applicant seeks to appropriate. § 85-2-311(1)(a)(i), MCA. (FOF Nos. 19 - 20)

Legal Availability:

FINDINGS OF FACT

Legal Availability of Groundwater

25. The Department calculated physical availability of groundwater at 4,270 AF per annum. The Groundwater Technical Report computed groundwater legal demands of 482.25 AF per annum. Subtracting the legal demands from the groundwater flux results in 3,871.57 AF per annum of groundwater that can be considered legally available. Groundwater is legally available in the amount requested.

Legal Availability of Surface Water

26. The Department's Depletion Report analyzed potentially affected surface waters, concluding that "the lower reach of Lone Creek and Jack Creek downstream of Lone Creek are hydraulically connected to the source aquifer." Lone Creek is tributary to Jack Creek, which is tributary to the Madison River. Evaluating Lone Creek for physical availability is unnecessary since the only water right in the Department's records with a source of Lone Creek is owned by the Applicant and is conditioned to allow diversion of water only during high spring flows when water is legally available based on downstream hydropower water rights. Jack Creek serves a significant number of water rights and is a tributary to the Madison River, so both Jack Creek and the Madison River were evaluated for legal availability. For Jack Creek, Table 4 summarizes data from the USGS stream gage that was active between 1973 – 1992. The gage was located near the point where Jack Creek exited the mountains and entered the bench above the Madison River.

Table 4: Median of Mean Monthly Flow Rate, 1973 – 1992, USGS gage 06040300 Jack Creek near Ennis MT

Month	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Flow Rate, CFS	14.7	13.4	14	33.2	109.2	177.2	73.5	34.9	27.6	22.3	17.9	16.4

For the Madison River, Table 5 summarizes data from the USGS stream gage that was active between 1951 – present. The gage is located approximately 12.8 river miles upstream from the Jack Creek-Madison River confluence near the unincorporated community of Cameron.

Table 5: Median of the Mean Monthly Flow Rate, 1951 – 2020, USGS gage 06040000 Madison River near Cameron MT Gage

Month	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Flow Rate, CFS	1117	987.2	1057	1164	1564	2594	1578	1300	1308	1478	1638	1124

27. At equilibrium, depletion to surface waters is equivalent to consumption under the proposed permit. Given the depth of the source aquifer and the distance to potentially affected stream reaches, the Depletion Report modeled depletions as constant year-round. The report calculated a net depletion of 0.427 AF per day or a constant 96.6 GPM, for a total of 155.77 AF per year.

28. Jack Creek was evaluated for legal availability in two segments: (1) from the zone of influence of groundwater pumping to the delivery point for mitigation water, and then (2) from the mitigation delivery point to the confluence with the Madison River. Along Reach #1, no mitigation water is available to offset depletions, so it was evaluated on a year-round basis. Table 6 summarizes the legal availability for Reach #1.

Table 6: Jack Creek Reach #1 Legal Availability, Zone of Influence to Mitigation Point of Diversion, Year-Round

Month	Physical Availability (CFS)	Existing Legal Demands (CFS)	Physical – Legal (CFS)
January	14.70	24.08	-9.38
February	13.40	24.08	-10.68
March	14.00	24.08	-10.08
April	33.20	24.08	9.12
May	109.20	24.08	85.12
June	177.20	24.33	49.17
July	73.50	24.41	10.49
August	34.90	24.41	10.49
September	27.60	24.41	3.19
October	22.25	24.41	-2.16
November	17.90	24.08	-6.18
December	16.40	24.08	-7.68

As shown in Table 6, Reach #1 of Jack Creek does not have wintertime legal availability between the months of October – March. Water is legally available between April – September. This reach of Jack Creek is above the headgate point at which mitigation water would be left instream in Jack Creek. Montana FWP submitted a Consent to Approval, signed by Director Martha Williams on February 14, 2020, for Jack Creek. In the months of October – March, the only water right apart from the MT FWP reservation is one stock direct-from-source water right that is senior to MT FWP.

29. Along Reach #2, mitigation water will offset all May through October depletions, so it was evaluated only from November through April. Table 7 summarizes the legal availability for Reach #2.

Table 7: Jack Creek Reach #2 Legal Availability, Mitigation Point of Diversion to Madison River, Wintertime Only

Month	Physical Availability (CFS)	Existing Legal Demands (CFS)	Physical – Legal (CFS)
January	14.70	25.17	-10.47
February	13.40	25.17	-11.77
March	14.00	25.17	-11.77
April	33.20	25.17	8.03
November	17.90	25.17	-7.27
December	16.40	25.17	-8.77

As shown in Table 7, Reach #2 of Jack Creek does not have wintertime legal availability between the months of November – March. Water is legally available during the month of April. The Applicant's mitigation plan will offset any depletions between May – October. Montana FWP submitted a Consent to Approval, signed by Director Martha Williams on February 14, 2020, for Jack Creek. In the months of November – March, the only water rights apart from the MT FWP reservation are five stock direct-from-source water rights that are all senior to MT FWP.

30. The Madison River was evaluated for legal availability from the confluence of Jack Creek to Ennis Lake. No evaluation was necessary below Ennis Lake because the Madison River is impounded by Madison Dam, which can store the full volume of mitigation water and which reregulates outflows. The full volume of water is mitigated between May – October, so only the remaining wintertime months were analyzed for legal availability. Table 8 summarizes wintertime legal availability in the Madison River.

Table 8: Madison River Legal Availability, Jack Creek Confluence to Ennis Lake, Wintertime Only

Month	Physical Availability (CFS)	Existing Legal Demands (CFS)	Physical – Legal (CFS)
January	1117.00	901.67	215.33
February	987.20	901.67	85.53
March	1057.00	901.67	155.33
April	1164.00	901.67	262.33
November	1638.00	1051.67	586.33
December	1124.00	1051.67	72.33

31. Net depletions to Jack Creek and the Madison River total 155.77 AF per annum and were distributed at a constant rate of 96.6 GPM throughout the year. As shown in the preceding Tables, surface water is not legally available in the potentially affected surface water sources year-round. The Madison River is located within the Jefferson-Madison River Basin, which was legislatively closed to new appropriations of water effective April 1, 1993.

32. The Applicant submitted a mitigation plan, discussed in detail in the Adverse Effect Section of this document, that proposes to fully mitigate depletions between May – October.

33. Montana FWP owns Reservation 41F 30017484, for 24 CFS of water year-round from Jack Creek. Montana FWP submitted a Consent to Approval, signed by Director Martha Williams on February 14, 2020.

CONCLUSIONS OF LAW

34. Pursuant to § 85-2-311(1)(a), MCA, an applicant must prove by a preponderance of the evidence that:

(ii) water can reasonably be considered legally available during the period in which the applicant seeks to appropriate, in the amount requested, based on the records of the department and other evidence provided to the department. Legal availability is determined using an analysis involving the following factors:

(A) identification of physical water availability;

(B) identification of existing legal demands on the source of supply throughout the area of potential impact by the proposed use; and

(C) analysis of the evidence on physical water availability and the existing legal demands,

including but not limited to a comparison of the physical water supply at the proposed point of diversion with the existing legal demands on the supply of water.

E.g., ARM 36.12.101 and 36.12.120; Montana Power Co., 211 Mont. 91, 685 P.2d 336 (permit granted to include only early irrigation season because no water legally available in late irrigation season); *In the Matter of Application for Beneficial Water Use Permit No. 81705-g76F by Hanson* (DNRC Final Order 1992).

35. It is the applicant's burden to present evidence to prove water can be reasonably considered legal available. E.g., Sitz Ranch v. DNRC, DV-10-13390, Montana Fifth Judicial District Court, *Order Affirming DNRC Decision*, (2011) Pg. 7 (the legislature set out the criteria (§ 85-2-311, MCA) and placed the burden of proof squarely on the applicant. The Supreme Court has instructed that those burdens are exacting.); see also Matter of Application for Change of Appropriation Water Rights Nos. 101960-41S and 101967-41S by Royston (1991), 249 Mont. 425, 816 P.2d 1054 (burden of proof on applicant in a change proceeding to prove required criteria); *In the Matter of Application to Change Water Right No. 41H 1223599 by MGRR #1, LLC.*, (DNRC Final Order 2005))(it is the applicant's burden to produce the required evidence.); *In the Matter of Application for Beneficial Water Use Permit No. 41H 30023457 by Utility Solutions, LLC* (DNRC Final Order 2007)(permit denied for failure to prove legal availability); see also ARM 36.12.1705.

36. Pursuant to Montana Trout Unlimited v. DNRC, 2006 MT 72, 331 Mont. 483, 133 P.3d 224, the Department recognizes the connectivity between surface water and groundwater and the effect of pre-stream capture on surface water. E.g., Wesmont Developers v. DNRC, CDV-2009-823, Montana First Judicial District Court, *Memorandum and Order*, (2011) Pgs. 7-8; Where a proposed groundwater appropriation depletes surface water, applicant must prove legal availability of amount of depletion of surface water throughout the period of diversion either through a mitigation /aquifer recharge plan to offset depletions or by analysis of the legal demands on and availability of water in the surface water source. Robert and Marlene Takle v. DNRC *et al.*, Cause No. DV-92-323, Montana Fourth Judicial District for Ravalli County, *Opinion and Order* (June 23, 1994); *In the Matter of Beneficial Water Use Permit Nos. 41H 30012025 And 41H 30013629 by Utility Solutions LLC* (DNRC Final Order 2006)(permits granted), *affirmed*, Faust v. DNRC et al., Cause No. CDV-2006-886, Montana First Judicial District (2008); *In the Matter of Application for Beneficial Water Use Permit 41H 30019215 by Utility*

Solutions LLC (DNRC Final Order 2007*)*(permit granted)*, affirmed*, Montana River Action Network et al. v. DNRC et al., Cause No. CDV-2007-602, Montana First Judicial District (2008); *In the Matter of Application for Beneficial Water Use Permit No. 41H 30023457 by Utility Solutions LLC* (DNRC Final Order 2007) (permit denied for failure to analyze legal availability outside of irrigation season (where mitigation applied)); *In the Matter of Application for Beneficial Water Use Permit No. 41H 30026244 by Utility Solutions LLC* (DNRC Final Order 2008); *In the Matter of Application for Beneficial Water Use Permit No. 76H-30028713 by Patricia Skergan and Jim Helmer* (DNRC Final Order 2009)(permit denied in part for failure to analyze legal availability for surface water for depletion); Sitz Ranch v. DNRC, DV-10-13390, Montana Fifth Judicial District Court, *Order Affirming DNRC Decision*, (2011) Pg. 5 (Court affirmed denial of permit in part for failure to prove legal availability of stream depletion of 3 gpm and 9 gpm respectively to slough and Beaverhead River); Wesmont Developers v. DNRC, CDV-2009-823, Montana First Judicial District Court, *Memorandum and Order*, (2011) Pgs. 11-12 ("DNRC properly determined that Wesmont cannot be authorized to divert, either directly or indirectly, 205.09 acre-feet from the Bitterroot River without establishing that the water does not belong to a senior appropriator"; applicant failed to analyze legal availability of surface water where projected surface water depletion from groundwater pumping).

Applicant may use water right claims of potentially affected appropriators as a substitute for "historic beneficial use" in analyzing legal availability of surface water under § 85-2-360(5), MCA. Royston, supra.

37. A flow of water on a given date does not show that water is legally available without showing that all prior appropriators were diverting all claimed water at that moment. Sitz Ranch v. DNRC, DV-10-13390, Montana Fifth Judicial District Court, *Order Affirming DNRC Decision*, (2011) Pgs. 5-6. A flow of water past a point on a particular date or dates does not demonstrate that water is legally available. Id.

38. In analyzing legal availability for surface water, applicant was required to evaluate legal demands on the source of supply throughout the "area of potential impact" by the proposed use under § 85-2-311(1)(a)(ii), MCA, not just within the "zone of influence." Sitz Ranch v. DNRC, DV-10-13390, Montana Fifth Judicial District Court, *Order Affirming DNRC Decision*, (2011) Pg. 6.

39. *In the Matter of Beneficial Water Use Permit No. 62935-s76LJ by Crop Hail Management* (DNRC Final Order 1991)(Applicant showed water physically available for appropriation by producing evidence based on upstream diversions; however, he failed to show water legally available with information of downstream uses).

40. Use of published upstream gauge data minus rights of record between gauge and point of diversion adjusted to remove possible duplicated rights shows water physically available. Using same methodology and adding rights of record downstream of point of diversion to the mouth of the stream shows water legally available. *In the Matter of Application for Beneficial Water Use Permit No. 41P-105759 by Sunny Brook Colony* (DNRC Final Order 2001).

41. Use of an infiltration gallery for historic irrigation water rights can offset year-around surface water depletions from proposed new groundwater appropriation to prove legal availability. E.g., *In the Matter of Combined Application for Beneficial Water Use Permit No. 76H- 30043133 and Application No. 76H-30043132 to Change Water Right Nos. 76H-121640-00, 76H-131641-00 and 76H-131642-00 by the Town of Stevensville* (DNRC Final Order 2011).

42. Consent of a downstream senior water right holder does not prove legal availability. Senior user cannot subrogate their right to a specific user and shift the burden to another junior water right holder. *In the Matter of Application for Beneficial Water Use Permit No. 41K-30043385 by Marc E. Lee* (DNRC Final Order 2011); *In the Matter of Application for Beneficial Water Use Permit No. 41K-30045713 by Nicholas D. Konen*, (DNRC Final Order 2011)(permit conditioned on high flows to meet legal availability).

43. The Applicant has proven by a preponderance of the evidence that groundwater can reasonably be considered legally available during the period in which the Applicant seeks to appropriate, in the amount requested. (FOF No. 25)

44. For purposes of legal availability of surface water, the most junior water right on Reach #1 of Jack Creek (FWP) has consented to the Applicant's permit and established mitigation plan. (Consent to Approval). The Consent establishes that FWP's actual legal demand during both the irrigation season and non-irrigation season will be satisfied based upon Applicant's mitigation plan. Under the unique circumstances here, where the most junior water right consents to adverse effect and is the only water right that is not satisfied by the median of the mean flow in all months, that consent is sufficient to establish legal availability.

45. Based on the Applicant's May – October mitigation plan and the Consent to Approval, the Applicant has proven by a preponderance of the evidence that surface water in potentially impacted surface water sources can reasonably be considered legally available. (FOF Nos. 26 – 33)

Adverse Effect

FINDINGS OF FACT

46. The Aquifer Testing Report identified 29 groundwater rights in the zone of influence that are predicted to experience drawdowns of greater than 1 foot. The maximum drawdown in another well which has a water right is 42 feet. All wells that were evaluated have a remaining water column of 13 feet or greater. The proposed use of groundwater will not adversely affect other groundwater appropriators.

47. The Applicant's mitigation plan will leave 155.77 AF of historically consumed water in Jack Creek at the historical headgate located in the NWNESW of Section 33, T5 S, R1 E, Madison County. The 155.77 AF is the total year-round consumption for the permit, but since irrigation water rights are being changed, the period of use for the instream mitigation is May 1 to October 31, 183 days. The corresponding instantaneous flow rate is 0.43 CFS left instream.

48. As shown in Table 6, Reach #1 of Jack Creek does not have wintertime legal availability between the months of October – March. Water is legally available between April – September. This reach of Jack Creek is above the headgate point at which mitigation water would be left instream in Jack Creek. Montana FWP submitted a Consent to Approval, signed by Director Martha Williams on February 14, 2020. In the months of October – March, the only water right apart from the MT FWP reservation is one stock direct-from-source water right that is senior to MT FWP. Gage data show that water has always been available in sufficient quantities to exercise this water right. Depletions from pumping under this Permit will not adversely affect the stock direct-from-source appropriator's ability to reasonably exercise their water right.

49. Reach #2 of Jack Creek is below the mitigation point where water will be left instream, so depletions will be fully mitigated from May – October. Table 7 shows that water is legally available in the month of April, but not available in January – March and November – December. Montana FWP submitted a Consent to Approval, signed by Director Martha Williams on February 14, 2020. In the remaining months of January – March and November – December,

the only water rights apart from the MT FWP reservation are five stock direct-from-source water rights that are senior to MT FWP. Gage data show that water has always been available in sufficient quantities to exercise these water rights. Depletions from pumping under this Permit will not adversely affect the stock direct-from-source appropriators' ability to reasonably exercise their water rights. Based on the Consent to Approval form and legally available water in the month of April, the Department finds that the proposed appropriation will not cause adverse effect to existing water rights or reservations along Reach #2 of Jack Creek.

50. The full volume of depletion will be offset during the May – October months. These depletions will accrue to Jack Creek and then to the Madison River. As shown in Table 8, as long as the full volume is mitigated during the May – October months, the Madison River has water legally available along the reach from the Jack Creek confluence to Ennis Lake. Ennis Lake is a large reservoir with significant storage capacity that reregulates downstream flows, so it is unnecessary to analyze the Madison River below Ennis Lake. The full volumetric depletion to the Madison River will be seasonally offset between May – October, so the proposed project will not cause adverse effect to existing water rights or reservations along the Madison River.

51. The Jack Creek mitigation plan is incorporated into the Department's analysis as the following condition.

IMPORTANT INFORMATION – MITIGATION REQUIRED

THE APPROPRIATOR'S USE OF WATER UNDER THIS PERMIT IS CONDITIONED UPON THE 155.77 AC-FT OF MITIGATION VOLUME REQUIRED TO OFFSET ADVERSE EFFECTS FROM NET DEPLETION TO JACK CREEK. DIVERSION UNDER THIS PERMIT MAY NOT COMMENCE UNTIL THE MITIGATION PLAN AS SPECIFICALLY DESCRIBED AND APPROVED THROUGH CHANGE AUTHORIZATION 41F 30070322 IS LEGALLY IMPLEMENTED. DIVERSION UNDER THIS PERMIT, EXCEPT FOR EMERGENCY USE, MUST STOP IF MITIGATION AS HEREIN REQUIRED IN AMOUNT, LOCATION, AND DURATION CEASES.

52. The Applicant has meters on all of their existing wells and a measurement reporting condition for their municipal-type water rights. On the six wells involved in this Application, they propose to install electromagnetic meters to measure instantaneous flow rate and to totalize volume for the six new wells. The proposed measurement plan is incorporated into the Department's analysis as the following condition.

WATER MEASUREMENT-INLINE FLOW METER REQUIRED
THE APPROPRIATOR SHALL INSTALL A DEPARTMENT APPROVED IN-LINE FLOW METER AT A POINT IN THE DELIVERY LINE APPROVED BY THE DEPARTMENT. WATER MUST NOT BE DIVERTED UNTIL THE REQUIRED MEASURING DEVICE IS IN PLACE AND OPERATING. ON A FORM PROVIDED BY THE DEPARTMENT, THE APPROPRIATOR SHALL KEEP A WRITTEN MONTHLY RECORD OF THE FLOW RATE AND VOLUME OF ALL WATER DIVERTED, INCLUDING THE PERIOD OF TIME. RECORDS SHALL BE SUBMITTED BY NOVEMBER 30 OF EACH YEAR AND UPON REQUEST AT OTHER TIMES DURING THE YEAR. FAILURE TO SUBMIT REPORTS MAY BE CAUSE FOR REVOCATION OF A PERMIT OR CHANGE. THE RECORDS MUST BE SENT TO THE WATER RESOURCES REGIONAL OFFICE. THE APPROPRIATOR SHALL MAINTAIN THE MEASURING DEVICE SO IT ALWAYS OPERATES PROPERLY AND MEASURES FLOW RATE AND VOLUME ACCURATELY.

53. Based upon the Applicant's full volumetric mitigation between the months of May – October and the Consent to Approval form from MT FWP, the Department finds that the proposed appropriation will not cause adverse effect to existing water rights or reservations.

CONCLUSIONS OF LAW

54. Pursuant to § 85-2-311(1)(b), MCA, the Applicant bears the affirmative burden of proving by a preponderance of the evidence that the water rights of a prior appropriator under an existing water right, a certificate, a permit, or a state water reservation will not be adversely affected. Analysis of adverse effect must be determined based on a consideration of an applicant's plan for the exercise of the permit that demonstrates that the applicant's use of the water will be controlled so the water right of a prior appropriator will be satisfied. See Montana Power Co. (1984), 211 Mont. 91, 685 P.2d 336 (purpose of the Water Use Act is to protect senior appropriators from encroachment by junior users); Bostwick Properties, Inc. ¶ 21.

55. An applicant must analyze the full area of potential impact under the § 85-2-311, MCA criteria. *In the Matter of Beneficial Water Use Permit No. 76N-30010429 by Thompson River Lumber Company* (DNRC Final Order 2006). While § 85-2-361, MCA, limits the boundaries expressly required for compliance with the hydrogeologic assessment requirement, an applicant is required to analyze the full area of potential impact for adverse effect in addition to the requirement of a hydrogeologic assessment. Id. ARM 36.12.120(8).

56. Applicant must prove that no prior appropriator will be adversely affected, not just the objectors. Sitz Ranch v. DNRC, DV-10-13390, Montana Fifth Judicial District Court, *Order Affirming DNRC Decision*, (2011) Pg. 4.

57. It is the applicant's burden to produce the required evidence. E.g., Id. at Pg. 7(legislature has placed the burden of proof squarely on the applicant); *In the Matter of Application to Change Water Right No. 41H 1223599 by MGRR #1, LLC.*, (DNRC Final Order 2005).

58. Section 85-2-311 (1)(b) of the Water Use Act does not contemplate a *de minimis* level of adverse effect on prior appropriators. Wesmont Developers v. DNRC, CDV-2009-823, Montana First Judicial District Court, *Memorandum and Order*, (2011) Pg. 8; see also, *In the Matter of Application for Beneficial Water Use Permit No. 76H-30028713 by Patricia Skergan and Jim Helmer* (DNRC Final Order 2009)(permit denied).

59. Simply asserting that an acknowledged reduction, however small, would not affect those with a prior right does not constitute the preponderance of the evidence necessary to sustain applicant's burden of proof. Wesmont Developers v. DNRC, CDV-2009-823, Montana First Judicial District Court, *Memorandum and Order*, (2011) Pg. 11 (Court rejected applicant's argument that net depletion of .15 millimeters in the level of the Bitterroot River could not be adverse effect.); Sitz Ranch v. DNRC, DV-10-13390, Montana Fifth Judicial District Court, *Order Affirming DNRC Decision*, (2011) Pgs. 3-4 (Court rejected applicant's arguments that its net depletion (3 and 9 gpm, respectively to Black Slough and Beaverhead River) was "not an adverse effect because it's not measurable," and that the depletion "won't change how things are administered on the source."); *In the Matter of Beneficial Water Use Permit No. 76N-30010429 by Thompson River Lumber Company (DNRC Final Order 2006*)(adverse effect not required to be measurable but must be calculable)*;* see also Robert and Marlene Tackle v. DNRC *et al.*, Cause No. DV-92-323, Montana Fourth Judicial District for Ravalli County, *Opinion and Order* (June 23, 1994).

After calculating the projected depletion for the irrigation season, the District Court in Sitz Ranch v. DNRC explained:

> Section 85-2-363(3)(d) MCA requires analysis whether net depletion will adversely affect prior appropriators. Many appropriators are those who use surface water. Thus, surface water must be analyzed to determine if there is a net depletion to that resource. Sitz's own evidence demonstrates that about 8 acre feet of water will be consumed each irrigation season. Both Sitz and any other irrigator would claim harm if a third party were allowed to remove 8 acre feet of water each season from the source upon which they rely.

Sitz Ranch v. DNRC, DV-10-13390, Montana Fifth Judicial District Court, *Order Affirming DNRC Decision*, (2011) Pgs. 3-4.

60. The Department can and routinely does, condition a new permit's use on use of that special management, technology or measurement such as augmentation now generally known as mitigation and aquifer recharge. See § 85-2-312; § 85-2-360 et seq., MCA; see, e.g., *In the Matter of Beneficial Water Use Permit No. 107-41I by Diehl Development* (DNRC Final Order 1974) (No adverse effect if permit conditions to allow specific flow past point of diversion.); *In the Matter of Combined Application for Beneficial Water Use Permit No. 76H- 30043133 and Application No. 76H-30043132 to Change Water Right Nos. 76H-121640-00, 76H-131641-00 and 76H-131642-00 by the Town of Stevensville* (DNRC Final Order 2011).

61. The Department has a history of approving new appropriations where applicant will mitigate/augment to offset depletions caused by the new appropriation. E.g., *In the Matter of Beneficial Water Use Permit Application Nos. 41H 30012025 and 41H 30013629 by Utility Solutions, LLC*, (DNRC Final Order 2006)(permit conditioned to mitigate/augment depletions to the Gallatin River by use of infiltration galleries in the amount of .55 cfs and 124 AF*), affirmed,* Faust v. DNRC *et al.,* Cause No. CDV-2006-886, Montana First Judicial District (2008); *In the Matter of Beneficial Water Use Permit Application Nos. 41H 30019215 by Utility Solutions, LLC, (DNRC Final Order 2007*)(permit conditioned to mitigate 6 gpm up to 9.73 AF of potential depletion to the Gallatin River), *affirmed,* Montana River Action Network v. DNRC, Cause No. CDV-2007-602, Montana First Judicial District Court, (2008); *In the Matter of Application for Beneficial Water Use Permit No. 41H 30026244 by Utility Solutions LLC* (DNRC Final Order 2008)(permit conditioned on mitigation of 3.2 gpm up to 5.18 AF of depletion to the Gallatin River); *In the Matter of Beneficial Water Use Permit Application No. 41I-104667 by Woods and Application to Change Water Right No 41I-G(W) 125497 by Ronald J. Woods*, (DNRC Final Order 2000); *In The Matter of Application To Change Appropriation Water Right 76GJ 110821 by Peterson and MT Department of Transportation*,(DNRC Final Order 2001); *In The Matter of Application To Change Appropriation Water Right No. 76G-3235699 by Arco Environmental Remediation LLC*.(DNRC Final Order 2003) (allows water under claim 76G-32356 to be exchanged for water appropriated out of priority by permits at the wet closures and wildlife to offset consumption). *In The Matter of Designation of the Larsen Creek Controlled Groundwater Area as Permanent, Board of Natural Resources Final Order* (1988).

Montana case law also provides a history of mitigation, including mitigation by new or untried methods. *See Thompson v. Harvey (1974),154 Mont. 133, 519 P.2d 963; Perkins* v. Kramer *(1966), 148 Mont. 355, 423 P.2d 587.*

62. The requirement for mitigation in closed basins has been codified in § 85-2-360, *et seq.*, MCA. Section 85-2-360(5), MCA provides in relevant part:

> A determination of whether or not there is an adverse effect on a prior appropriator as the result of a new appropriation right is a determination that must be made by the department based on the amount, location, and duration of the amount of net depletion that causes the adverse effect relative to the historic beneficial use of the appropriation right that may be adversely affected.

E.g., *Combined Application for Beneficial Water Use Permit No. 76G-30050801 and Change Authorization 76G-30050805 by Missoula County* (DNRC Final Order 2012)(permit granted conditioned on mitigation of depletion ranging .8 to 7.4 gpm); *In the Matter of Application No. 76H-30046211 for a Beneficial Water Use Permit and Application No.76H-30046210 to Change a Non-filed Water Right by Patricia Skergan and Jim Helmer* (DNRC Final Order 2010, Combined Application)(permit granted conditioned on mitigation).

63. If the applicant seeks to use a mitigation plan to prove lack of adverse effect, the applicant must have a defined mitigation proposal at the time of application. It is the Applicant's burden to come forward with proof at the time the Application is made. The Department cannot approve a permit on this basis of some unidentified proposal that it has no opportunity to evaluate as to whether it successfully allows the Applicant to prove the criteria. Wesmont Developers v. DNRC, CDV-2009-823, Montana First Judicial District Court, *Memorandum and Order*, (2011) Pg. 10 (it was within the discretion of the Department to decline to consider an undeveloped mitigation proposal as mitigation for adverse effect in a permit proceeding); *In the Matter of Beneficial Water Use Permit Nos. 41H 30012025 And 41H 30013629 by Utility Solutions LLC* (DNRC Final Order 2006) (permits granted based on plan for mitigation of depletion), *affirmed*, Faust v. DNRC *et al.*, Cause No. CDV-2006-886, Montana First Judicial District (2008); *In the Matter of Application for Beneficial Water Use Permit 41H 30019215 by Utility Solutions LLC* (DNRC Final Order 2007) (permit granted on basis of plan for mitigation of depletion)*, affirmed*, Montana River Action Network *et al*. v. DNRC *et al.,* Cause No. CDV-2007-602, Montana First Judicial District (2008); *In the Matter of Application for Beneficial Water Use Permit No. 41H 30026244 by Utility Solutions LLC* (DNRC Final Order 2008); §85-2-360 *et seq.,* MCA.

64. In analyzing adverse effect to other appropriators, an applicant may use the water rights claims of potentially affected appropriators as evidence of their "historic beneficial use." See Matter of Application for Change of Appropriation Water Rights Nos. 101960-41S and 101967-41S by Royston (1991), 249 Mont. 425, 816 P.2d 1054.

65. The Department will evaluate whether an applicant's proposed plan, i.e. mitigation or aquifer recharge, will offset depletions so as to meet § 85-2-311(1)(b), MCA, in the permit proceeding. The applicant's authority to use the water as proposed is assumed for the purposes of the analysis. The authority of the applicant to use the offset water as proposed for the plan is not determined in the permit proceeding but is determined in any required application for change in appropriation. Whether the applicant proves by a preponderance of the evidence that the mitigation/aquifer recharge plan will be effective is determined in the permit proceeding. Thus, the applicant must accurately convey to the Department exactly what it proposes for a mitigation/aquifer recharge plan. E.g., Wesmont Developers v. DNRC, CDV-2009-823, Montana First Judicial District Court, *Memorandum and Order*, (2011) Pg. 10 (it was within the discretion of the Department to decline to consider an undeveloped mitigation proposal as mitigation for adverse effect in a permit proceeding).

66. Pursuant to § 85-2-363, MCA, an applicant whose hydrogeologic assessment conducted pursuant to § 85-2-361, MCA, predicts that there will be a net depletion of surface water shall offset the net depletion that results in the adverse effect through a mitigation plan or an aquifer recharge plan.

67. Pursuant to § 85-2-362, MCA, a mitigation plan must include: where and how the water in the plan will be put to beneficial use; when and where, generally, water reallocated through exchange or substitution will be required; the amount of water reallocated through exchange or substitution that is required; how the proposed project or beneficial use for which the mitigation plan is required will be operated; evidence that an application for a change in appropriation right, if necessary, has been submitted; evidence of water availability; and evidence of how the mitigation plan will offset the required amount of net depletion of surface water in a manner that will offset an adverse effect on a prior appropriator.

68. In this case, the Applicant proposes to mitigate its full consumptive use under the proposed appropriation. This plan provides mitigation of the full volumetric depletion during the seasonal months of May – October. Because Applicant proposes to mitigate the full amount of

its consumptive use, there is no adverse effect from depletion of surface waters to the historic beneficial use of surface water rights. E.g., *In the Matter of Application for Beneficial Water Use Permit No. 41H 30026244 by Utility Solutions LLC* (DNRC Final Order 2008).

69. An applicant is not required to prove a lack of adverse effect for any water right identified on a written consent to approval and the Department "may not consider an adverse effect caused by the grant of an application pursuant to this section on any water right listed on a written consent to approval filed pursuant to 85-2-311t." Section 85-2-361(3)(b), MCA; *see also* §§ 85-2-402(1)(c) and (19), MCA.

70. Based on the FWP Consent to Approval (FOF No. 33), and §§ 85-2-402(1)(c) and (19) which explicitly direct the Department to forgo an adverse effects analysis when presented with the consent, the Applicant has satisfied this requirement for Jack Creek. Section 85-2-402(2)(a), MCA.

71. The Applicant has proven by a preponderance of the evidence that the water rights of a prior appropriator under an existing water right, a certificate, a permit, or a state water reservation will not be adversely affected by the proposed appropriation as conditioned on Applicant's plan. § 85-2-311(d), MCA. (FOF Nos. 46 – 52)

Adequate Diversion

FINDINGS OF FACT

72. The Revised Aquifer Test Report found that the six proposed wells could experience between 73.1 feet and 248.5 feet of drawdown. At this drawdown, five of the wells were modeled to have greater than 110 feet of remaining available water column. Well 2008-6 may have only 3.3 feet of available drawdown. Morrison-Maierle provided additional explanation that this well is currently able to operate at 30 GPM under a different pumping schedule. Morrison-Maierle concluded that, under this method of operation, well 2008-6 would have 37.4 feet of available water column. This well was drilled in 2008, but construction was halted prior to completion due to the 2008 financial collapse. The applicant stated that this well will be re-developed as their water system is built out.

73. A hydrogeologist supervised the aquifer testing. All aquifer tests except for one were overseen by professional engineers or hydrogeologists with Morrison-Maierle, with pumping equipment provided by Red Tiger Drilling, a licensed driller. The only aquifer test conducted by

another firm was done by professional engineers or hydrogeologists with Stahly and Associates, with assistance from Potts Drilling, a licensed driller. A professional hydrogeologist with Morrison-Maierle completed the Hydrogeologic Assessment Report.

74. Aquifer Testing Requirements in ARM 36.12.121(3)(a) require that "[p]umping must be maintained at a constant discharge rate equal to or greater than the proposed pumping rate for the entire duration of the test." None of the individual wells were tested at the requested 405 GPM flow rate. Each well was tested at a flow rate equal to or greater than the design flow rate for that well – the total aquifer test flow rate for all wells is 590 GPM, greater than the requested 405 GPM. The Applicant requested a variance from ARM 36.12.121(3)(a) because the sum of their tested flow rates exceeds the requested water right flow rate. The Department granted this request with a letter dated January 16, 2015.

75. The water system is classified as a public water supply system (PWS) and is regulated by the Montana, Department of Environmental Quality. Additionally, the Montana Public Service Commission regulates the rates and service quality. The Applicant operates an existing PWS system with all of their current PWS wells metered. They propose to install electromagnetic meters to measure instantaneous flow rate and to totalize volume for the six new wells.

76. The Applicant retains professional engineers licensed to practice in the State of Montana.

77. The Applicant's means of diversion are adequate for the proposed uses.

CONCLUSIONS OF LAW

78. Pursuant to § 85-2-311(1)(c), MCA, an Applicant must demonstrate that the proposed means of diversion, construction, and operation of the appropriation works are adequate. The adequate means of diversion statutory test merely codifies and encapsulates the common law notion of appropriation to the effect that the means of diversion must be reasonably effective, i.e., must not result in a waste of the resource. *In the Matter of Application for Beneficial Water Use Permit No. 33983s41Q by Hoyt* (DNRC Final Order 1981); § 85-2-312(1)(a), MCA.

79. Water wells must be constructed according to the laws, rules, and standards of the Board of Water Well Contractors to prevent contamination of the aquifer. *In the Matter of Application for Beneficial Water Use Permit No. 41I-105511 by Flying J Inc.* (DNRC Final Order 1999).

80. Information needed to prove that proposed means of diversion, construction, and operation of the appropriation works are adequate varies, based upon project complexity design

by licensed engineer adequate. *In the Matter of Application for Beneficial Water Use Permit No. 41C-11339900 by Three Creeks Ranch of Wyoming LLC* (DNRC Final Order 2002).

81. Specific ditch segments would be adequate after completion of maintenance and rehabilitation work. *In the Matter of Application for Beneficial Water Use Permit No. 43B-30002710 by USDA*. (DNRC Final Order 2005).

82. The Applicant has proven by a preponderance of the evidence that the proposed means of diversion, construction, and operation of the appropriation works are adequate for the proposed beneficial use. § 85-2-311(1)(c), MCA. (FOF Nos. 72 – 77).

Beneficial Use

FINDINGS OF FACT

83. The Applicant proposes to use water for municipal use, which is a recognized beneficial use of water in the State of Montana.

84. The Applicant requested a flow rate of 405 GPM, a diverted volume of 274.9 AF, and a consumed volume of 155.77 AF. The requested purpose is municipal, with sub-purposes of domestic, commercial, and lawn and garden irrigation.

85. To substantiate the amount of water requested, the Applicant submitted a detailed water use model, "Ultimate Water Use Engineering Report," dated May 2009. These calculations accounted for their existing water demand, existing water rights, planned demand reduction measures, and future supply required at full build-out. The Applicant calculated their ultimate water demand by accounting separately for residential domestic, commercial, hotel domestic, employee housing, snowmaking, and a contingent well (peak flow rate calculation only, DEQ requirement). Calculations were done for both flow rate and volume. The Applicant's calculations were for the entire resort at full build-out and considered snowmaking and golf course demands, but neither of those purposes are involved in the present Application (they are covered under other water rights), so they are not summarized in this Determination.

The Applicant used a residential domestic demand of 100 gallons per capita day (gpcd). They categorized existing and proposed residential developments into 18 different types and assigned different population densities (people per unit) to each category, based on current guest statistics. Occupancies at full build-out were forecasted, accounting for the high variability in occupancy at the Moonlight Resort (e.g., a peaking factor of 2 was used for popular winter

recreation holidays such as Christmas and President's Day weekend), while demand during shoulder seasons is less.

The hotel domestic use was calculated for a 50-unit hotel, assuming 2 persons per unit, and including the water use of additional amenities, such as housekeeping and dining.

Employee housing was estimated for 200 units with 2 persons per unit, based on a mix of studios for individual employees with some multiple-bedroom units. As with domestic use, peaking factors were applied during high-demand times and then reduced during shoulder seasons.

Commercial use was more difficult to forecast, so this estimate was based on the area available for future commercial development and then forecasted using the wastewater generation rates from current commercial uses.

Finally, requested flow rates were based on peak daily flow requirements from the Montana Department of Environmental Quality. The Applicant proposed storage tanks in order to reduce the required peak instantaneous flow rate.

Table 9 summarizes the water use calculations.

Table 9: Summary of Water Use Calculations

Ultimate Demand (Full Build-Out)		
Residential domestic =	331.7	AF
Commercial =	30	AF
Hotel domestic =	7.2	AF
Employee housing =	31.7	AF
Total, all domestic =	400.6	AF
Lawn and garden =	148.8	AF
Demand Reduction		
Domestic =	0	AF
Lawn and garden =	69.1	AF
Existing Water Rights		
Domestic =	166.8	AF
Lawn and garden =	38.6	AF
Total Amount Needed		
All domestic =	233.8	AF
Lawn and garden =	41.1	AF
Total =	274.9	AF

The existing water rights are 41H 99524-00, 41H 30005212, 41F 30013630, and 41F 30013631. The peak daily flow rate required at ultimate build-out was calculated as 1,599 GPM. Demand reduction measures reduce this by 720 GPM, and the existing water rights provide 491 GPM. The remainder is 388 GPM. The Applicant requested the full tested yield of all six wells, 405 GPM, in order to provide an additional 17 GPM as a contingency.

86. The total consumption corresponding to the requested beneficial use of 274.9 AF is 155.77 AF. The Depletion Report and the Technical Report show full calculations for the proposed consumption, but a summary is provided here. Indoor domestic and commercial use demand is 233.80 AF. Of this, 5 percent (11.69 AF) is consumed by indoor uses. The remaining wastewater effluent will be treated and then land-applied to the golf course at twice the rate of agronomic consumption. The remaining wastewater volume will be applied to 111.06 acres. The net irrigation water requirements for the nearest weather station are 12.35 inches per year. Total consumption will be 12.35 inches / 12 inches per foot x 111.06 acres = 114.30 AF consumed.

The total amount of water consumed by indoor use, 11.69 AF, and by wastewater treatment, 114.30 AF, is 125.99 AF. For lawn and garden irrigation of 28.94 acres, the Depletion Report calculated a consumed volume of 12.35 inches IWR / 12 inches per foot x 28.94 acres = 29.78 AF. The sum of these volumes is the total consumption of 155.77 AF.

87. The Applicant has demonstrated that a flow rate of 405 GPM and a diverted volume of 274.9 AF are required to meet the proposed municipal beneficial use.

CONCLUSIONS OF LAW

88. Under § 85-2-311(1)(d), MCA, an applicant must prove by a preponderance of the evidence the proposed use is a beneficial use. An appropriator may appropriate water only for a beneficial use. See also, §§ 85-2-301 and 402(2)(c), MCA. It is a fundamental premise of Montana water law that beneficial use is the basis, measure, and limit of the use. E.g., McDonald, supra; Toohey v. Campbell (1900), 24 Mont. 13, 60 P. 396.

89. The amount of water under a water right is limited to the amount of water necessary to sustain the beneficial use. E.g., Bitterroot River Protective Association v. Siebel, *Order on Petition for Judicial Review*, Cause No. BDV-2002-519, Montana First Judicial District Court, Lewis and Clark County (2003), *affirmed on other grounds*, 2005 MT 60, 326 Mont. 241, 108 P.3d 518; *In The Matter Of Application For Beneficial Water Use Permit No. 43C 30007297 by Dee Deaterly* (DNRC Final Order), *affirmed other grounds*, Dee Deaterly v. DNRC *et al*, Cause No. BDV-2007-186, Montana First Judicial District, *Order Nunc Pro Tunc on Petition for Judicial Review* (2009); Worden v. Alexander (1939), 108 Mont. 208, 90 P.2d 160; Allen v. Petrick (1924), 69 Mont. 373, 222 P. 451; *In the Matter of Application for Beneficial Water Use Permit No. 41S-105823 by French* (DNRC Final Order 2000).

Amount of water to be diverted must be shown precisely. Sitz Ranch v. DNRC, DV-10-13390, Montana Fifth Judicial District Court, *Order Affirming DNRC Decision*, (2011) Pg. 3 (citing BRPA v. Siebel, 2005 MT 60, and rejecting applicant's argument that it be allowed to appropriate 800 acre-feet when a typical year would require 200-300 acre-feet).

90. It is the applicant's burden to produce the required evidence. *In the Matter of Application to Change Water Right No. 41H 1223599 by MGRR #1, LLC.*, (DNRC Final Order 2005); see also Royston; Ciotti; Sitz Ranch v. DNRC, DV-10-13390, Montana Fifth Judicial District Court, *Order Affirming DNRC Decision*, (2011) Pg. 7.

91. Applicant proposes to use water for a municipal purpose, which is a recognized beneficial use. § 85-2-102(4), MCA. The Applicant proposes to use water for domestic use (which included garden and landscaping irrigation, also commonly referred to as “lawn and garden irrigation”), which is a recognized beneficial use. §85-2-102(4), MCA. “Domestic use” by DNRC rule “means those water uses common to a household including … (g) garden and landscaping irrigation up to five acres.” ARM 36.12.101(21). The Applicant has proven by a preponderance of the evidence that a municipal purpose is a beneficial use and that 274.9 AF of diverted volume and 405 GPM of water requested is the amount needed to sustain the beneficial use. (FOF Nos.83 – 87)

Possessory Interest

FINDINGS OF FACT

92. This application is for instream flow, sale, rental, distribution, or is a municipal use application in which water is supplied to another. It is clear that the ultimate user will not accept the supply without consenting to the use of water. Admin. R. Mont. 36.12.1802. The applicant has possessory interest in the property where the water is to be put to beneficial use or has the written consent of the person having the possessory interest.

CONCLUSIONS OF LAW

93. Pursuant to § 85-2-311(1)(e), MCA, an applicant must prove by a preponderance of the evidence that it has a possessory interest or the written consent of the person with the possessory interest in the property where the water is to be put to beneficial use, or if the proposed use has a point of diversion, conveyance, or place of use on national forest system lands, the applicant has any written special use authorization required by federal law to occupy, use, or traverse national forest system lands for the purpose of diversion, impoundment, storage, transportation, withdrawal, use, or distribution of water under the permit.

94. Pursuant to ARM 36.12.1802:

> (1) An applicant or a representative shall sign the application affidavit to affirm the following:
> (a) the statements on the application and all information submitted with the application are true and correct and
> (b) except in cases of an instream flow application, or where the application is for sale, rental, distribution, or is a municipal use, or in any other context in which water is being

supplied to another and it is clear that the ultimate user will not accept the supply without consenting to the use of water on the user's place of use, the applicant has possessory interest in the property where the water is to be put to beneficial use or has the written consent of the person having the possessory interest.

(2) If a representative of the applicant signs the application form affidavit, the representative shall state the relationship of the representative to the applicant on the form, such as president of the corporation, and provide documentation that establishes the authority of the representative to sign the application, such as a copy of a power of attorney.

(3) The department may require a copy of the written consent of the person having the possessory interest.

95. The Applicant has proven by a preponderance of the evidence that it has a possessory interest, or the written consent of the person with the possessory interest, in the property where the water is to be put to beneficial use. § 85-2-402(2)(d), MCA. (FOF No. 92)

CHANGE NO. 41F 30070322

WATER RIGHTS TO BE CHANGED

FINDINGS OF FACT

96. The Applicant seeks to change four water right claims: 41F 14211-00, 41F 15336-00, 41F 15345-00, and 41F 15348-00. These rights are for irrigation of 713.70 supplemental acres with priority dates ranging from 1865 to 1888. These rights each have flow rates ranging from 1.50 to 2.50 CFS and claimed diverted volumes ranging from 525 AF to 750 AF. Table 10 provides a summary of the water right elements. The period of use and period of diversion are from May 1 to October 31. The place of use is 713.70 acres located in Sections 18, 19, 20, 21, 28, 29, and 33 of T5 S, R1 E, Madison County. These four water rights have five points of diversion, located in the NENWSE of Section 29, SWNENE of Section 33, NESENE of Section 33, NWNESW of Section 34, and the NWNESW of Section 33; all T5 S, R1 E. The fifth point of diversion, located in the NWNESW of Section 33, is where water is left instream to provide mitigation for Provisional Permit 41F 30013630 and where additional mitigation water is proposed to be left instream in this Change Application. The main point of diversion on Jack Creek serving the place of use involved in this application is located in the NWNESW of Section 34. Water is conveyed to the place of use through a series of ditches. The place of use is located approximately 6 miles northeast of the Town of Ennis, Montana.

97. Table 10 summarizes the water rights proposed for change.

Table 10: Water Rights Proposed for Change

WR No. (41F)	Source	Flow (CFS)	Claimed Vol. (AF)	Purpose	Period of Use	Place of Use	Point of Diversion	Priority Date
14211	Jack Creek	1.50	Not Decreed	Irrigation; Mitigation	5/1 – 10/31	Secs. 18, 19, 20, 21, 28, 29, 33, T05S, R01E	NENWSE, Sec. 29; SWNENE, Sec. 33; NESENE, Sec. 33; NWNESW, Sec. 34; NWNESW, Sec. 33; all T05S, R01E	4/1/1865
15336	Jack Creek	2.50	750	Irrigation; Mitigation	5/1 – 10/31			4/15/1883
15345	Jack Creek	2.50	750	Irrigation; Mitigation	5/1 – 10/31			5/1/1888
15348	Jack Creek	1.75	525	Irrigation; Mitigation	5/1 – 10/31			10/1/1865
Note: Water right 41F 14221-00 was not decreed a volume. The claimed value was 638 AF.								

98. These rights are co-owned by MT Moonlight Basin Water & Sewer LLC and Jumping Horse Stock Ranch LLC. The Applicants provided a copy of the Water Rights Purchase Agreement, wherein Moonlight Basin acquired partial ownership in the four water rights involved in this change application from Jumping Horse Ranch's predecessor-in-interest, Braxton Ranch, by severance of a portion of the Jack Creek water rights being changed (41F 14211, 15336, 15345, and 15348).

99. Department records list 17 water rights as being supplemental, which means they have overlapping places of use. The rights can be combined to irrigate only overlapping parcels. Each right is limited to the flow rate and place of use of that individual use. The sum total volume of these water rights shall not exceed the amount put to historical and beneficial use.

41F 14211-00	41F 15336-00	41F 15337-00	41F 15338-00
41F 15339-00	41F 15340-00	41F 15341-00	41F 15342-00
41F 15343-00	41F 15344-00	41F 15345-00	41F 15346-00
41F 15347-00	41F 15348-00	41F 15349-00	41F 15350-00
41F 15351-00			

A condition of this Authorization, described in the Adverse Effect Section, is that the 133.2 acres involved in this change be permanently retired from production. None of the 17 supplemental water rights may be used to irrigate the 133.2 acres that is being retired.

100. These same four water rights were subject to Change Authorization 41F 30031144, issued in 2011. That change was similar in providing instream Jack Creek mitigation water for a new permit, 41F 30013630; the Applicant retired 56.3 acres in the west half of Section 28, T5 S, R1 E. In that change, a condition required complete retirement of the acreage, with none of the 17 supplemental water rights being used on it.

101. The following conditions are proposed for Permit 41F 30070321. Each condition is analyzed in detail in the corresponding section of this document.

IMPORTANT INFORMATION

THIS CHANGE AUTHORIZATION IS SUBJECT TO THE PERMANENT REMOVAL OF 133.2 ACRES FROM IRRIGATION AT LOCATIONS IN THE EAST HALF OF SECTION 19, SECTION 20, THE NORTHEAST QUARTER OF SECTION 29, AND THE WESTERN HALF OF SECTION 28, ALL T5S, R1E, MADISON COUNTY (SEE FILE FOR MAP OF SPECIFIC ACREAGE). IRRIGATION OF THESE 133.2 ACRES AFTER THIS AUTHORIZATION IS ISSUED WILL BE CAUSE FOR REVOCATION OF THIS AUTHORIZATION AND THE ASSOCIATED PERMIT 41F 30070321. APPLICANTS WILL BE REQUIRED YEARLY TO SUBMIT A PHOTO TAKEN DURING THE MIDDLE OF IRRIGATION SEASON SHOWING THAT THE ACREAGE REMAINED RETIRED FOR THAT YEAR.

IMPORTANT INFORMATION

THIS CHANGE AUTHORIZATION PROVIDES MITIGATION WATER FOR BENEFICIAL USE PERMIT 41F 30070321. IF AT ANY TIME THE MITIGATION COMPONENT OF THIS CHANGE AUTHORIZATION IS NOT MET, WATER USE UNDER BENEFICIAL USE PERMIT 41F 30070321 MUST BE STOPPED. IF MITIGATION CANNOT BE MET, APPLICANTS WILL PROVIDE A REPORT TO DNRC DETAILING THE AMOUNT OF SHORTAGE OF MITIGATION WATER AND HOW THE PERMIT USE WAS STOPPED TO PREVENT ADVERSE EFFECT.

WATER MEASUREMENT INFORMATION

THE APPROPRIATOR SHALL INSTALL DEPARTMENT APPROVED MEASURING DEVICE AT THE CURRENT ACTIVE POINT OF DIVERSION FOR THESE RIGHTS TO ENSURE THE MITIGATION WATER REMAINS INSTREAM. THIS CHANGE SHALL NOT BE EXERCISED UNTIL THE REQUIRED MEASURING DEVICE IS IN PLACE AND OPERATING. IF MORE THAN ONE POINT OF DIVERSION IS USED, APPROPRIATOR SHALL INSTALL DEPARTMENT APPROVED MEASURING DEVICES ON THE LOWERMOST POINT OF DIVERSION AND THE UPPERMOST POINT OF DIVERSION. ON A FORM PROVIDED BY THE DEPARTMENT, THE APPROPRIATOR SHALL KEEP A WRITTEN WEEKLY RECORD OF THE VOLUME OF MITIGATION WATER NOT DIVERTED AND LEFT INSTREAM, INCLUDING THE PERIOD OF TIME. RECORDS SHALL BE SUBMITTED BY NOVEMBER 30 OF EACH YEAR AND UPON REQUEST BY THE DEPARTMENT AT OTHER TIMES DURING

THE YEAR. FAILURE TO SUBMIT RECORDS MAY BE CAUSE FOR REVOCATION OF A PERMIT OR CHANGE. THE RECORDS MUST BE SENT TO THE WATER RESOURCES BOZEMAN REGIONAL OFFICE. THE APPROPRIATOR SHALL MAINTAIN THE MEASURING DEVICE SO IT ALWAYS OPERATES PROPERLY AND MEASURES THE VOLUME ACCURATELY.

CHANGE PROPOSAL

FINDINGS OF FACT

102. The Applicant proposes to retire 133.2 acres that were historically irrigated under these rights to provide a consumed volume of 155.77 AF to mitigate depletions to Jack Creek caused by pumping from the six wells under the concurrent permit application.

103. Instead of diverting water for irrigation use, water will instead be left instream at the Braxton Ranch headgate located in the NWNESW of Section 34, T5 S, R1 E, Madison County. The water rights have four points of diversion which are capable of diverting water to the entire 770 acres, but only the diversion previously listed was able to convey water to the acreage being removed. This diversion is the beginning measuring point for water left instream as mitigation for the associated permit application. This point of diversion is the first one on Jack Creek for Braxton Ranch.

104. The Applicant proposes to leave a constant flow rate of 0.43 CFS instream from May 1 – October 31, the full period of diversion. This flow rate across the 183-day period of diversion equates to the full volume of 155.77 AF. The proposed change is to provide mitigation for Permit 41F 30070321, so the following condition will be incorporated into the Department's analysis.

IMPORTANT INFORMATION

THIS CHANGE AUTHORIZATION PROVIDES MITIGATION WATER FOR BENEFICIAL USE PERMIT 41F 30070321. IF AT ANY TIME THE MITIGATION COMPONENT OF THIS CHANGE AUTHORIZATION IS NOT MET, WATER USE UNDER BENEFICIAL USE PERMIT 41F 30070321 MUST BE STOPPED. IF MITIGATION CANNOT BE MET, APPLICANTS WILL PROVIDE A REPORT TO DNRC DETAILING THE AMOUNT OF SHORTAGE OF MITIGATION WATER AND HOW THE PERMIT USE WAS STOPPED TO PREVENT ADVERSE EFFECT.

§ 85-2-402, MCA, CHANGE CRITERIA

GENERAL CONCLUSIONS OF LAW

105. An applicant in a change proceeding must affirmatively prove all of the criteria in § 85-2-402, MCA. Under this Preliminary Determination, the relevant change criteria in § 85-2-402(2), MCA, are:

> (2) Except as provided in subsections (4) through (6), (15), and (16) and, if applicable, subject to subsection (17), the department shall approve a change in appropriation right if the appropriator proves by a preponderance of evidence that the following criteria are met:
>
> (a) The proposed change in appropriation right will not adversely affect the use of the existing water rights of other persons or other perfected or planned uses or developments for which a permit or certificate has been issued or for which a state water reservation has been issued under part 3.
>
> (b) Except for a change in appropriation right for instream flow to protect, maintain, or enhance streamflows to benefit the fishery resource pursuant to 85-2-436 or a temporary change in appropriation right authorization to maintain or enhance streamflows to benefit the fishery resource pursuant to 85-2-408 or a change in appropriation right to instream flow to protect, maintain, or enhance streamflows pursuant to 85-2-320, the proposed means of diversion, construction, and operation of the appropriation works are adequate.
>
> (c) The proposed use of water is a beneficial use.
>
> (d) Except for a change in appropriation right for instream flow to protect, maintain, or enhance streamflows to benefit the fishery resource pursuant to 85-2-436 or a temporary change in appropriation right authorization pursuant to 85-2-408 or a change in appropriation right to instream flow to protect, maintain, or enhance streamflows pursuant to 85-2-320, the applicant has a possessory interest, or the written consent of the person with the possessory interest, in the property where the water is to be put to beneficial use or, if the proposed change involves a point of diversion, conveyance, or place of use on national forest system lands, the applicant has any written special use authorization required by federal law to occupy, use, or traverse national forest system lands for the purpose of diversion, impoundment, storage, transportation, withdrawal, use, or distribution of water.
>
> (e) If the change in appropriation right involves salvaged water, the proposed water-saving methods will salvage at least the amount of water asserted by the applicant.

106. The Department has jurisdiction to approve a change if the appropriator proves the applicable criteria in § 85-2-402, MCA. The requirements of Montana's change statute have been litigated and upheld in Matter of Application for Change of Appropriation Water Rights Nos. 101960-41S and 101967-41S by Royston (1991), 249 Mont. 425, 816 P.2d 1054, and the applicant has the burden of proof at all stages before the Department and courts. Hohenlohe v. DNRC, 2010 MT 203, ¶ 75; Town of Manhattan v. DNRC, Cause No. DV-09-872C, Montana Eighteenth Judicial District Court, *Order Re Petition for Judicial Review,* (2011) Pg. 8, ***aff'd on other grounds***, Town of Manhattan v. DNRC, 2012 MT 81.The burden of proof in a change

proceeding is by a preponderance of evidence, which is "more probable than not." Hohenlohe ¶¶ 33, 35.

107. In a change proceeding and in accordance with well-settled western water law, other appropriators have a vested right to have the stream conditions maintained substantially as they existed at the time of their appropriations. Spokane Ranch & Water Co. v. Beatty (1908), 37 Mont. 342, 96 P. 727;); McDonald v. State (1986), 220 Mont. 519, 722 P.2d 598 (existing water right is the pattern of historic use; beneficial use is the basis measure and the limit An applicant must prove that all other appropriators can continue to reasonably exercise their water rights under changes in the stream conditions attributable to the proposed change; otherwise, the change cannot be approved. Montana's change statute reads in part to this issue:

> 85-2-402. (2) … the department shall approve a change in appropriation right if the appropriator proves by a preponderance of evidence that the following criteria are met:
>
> (a) *The proposed change in appropriation right will not adversely affect the use of the existing water rights of other persons* or other perfected or planned uses or developments for which a permit or certificate has been issued or for which a state water reservation has been issued under part 3.
>
> ....
>
> (13) A change in appropriation right contrary to the provisions of this section is invalid. An officer, agent, agency, or employee of the state may not knowingly permit, aid, or assist in any manner an unauthorized change in appropriation right. A person or corporation may not, directly or indirectly, personally or through an agent, officer, or employee, attempt to change an appropriation right except in accordance with this section

(italics added).

Accordingly, the DNRC in administrative rulings has held that a water right in a change proceeding is defined by actual beneficial use, not the amount claimed or even decreed. E.g., *In the Matter of Application for Change Authorization No. G(W)028708-41I by Hedrich/Straugh/Ringer*, (DNRC Final Order 1991); *In the Matter of Application for Change Authorization No.G(W)008323-g76L by Starkel/Koester*, (DNRC Final Order 1992); *In The Matter of Application for Beneficial Water User Permit No 20736-S41H by the City of Bozeman and In the Matter of the Application to Sever or Sell Appropriation Water Right 20737-S41H*, Proposal for Decision and Memorandum at Pgs. 8-22 (Adopted by Final Order January 9,1985); see McDonald, supra (beneficial use is the measure, limit and basis, irrespective of greater quantity attempted to be appropriated); Quigley v. McIntosh, 110 Mont. 495, 103 P.2d 1067

(amount of water right is actual historic use); Town of Manhattan v. DNRC, Cause No. DV-09-872C, Montana Eighteenth Judicial District Court, *Order Re Petition for Judicial Review,* (2011) Pgs. 11-12 (proof of historic use is required even when the right has been decreed because the decreed flow rate or volume establishes the maximum appropriation that may be diverted, and may exceed the historical pattern of use, amount diverted or amount consumed through actual use, *citing* McDonald).

108. The Montana Supreme Court recently explained:

> An appropriator historically has been entitled to the greatest quantity of water he can put to use. Sayre v. Johnson, 33 Mont. 15, 18, 81 P. 389, 390 (1905). The requirement that the use be both beneficial and reasonable, however, proscribes this tenet. In re Adjudication of Existing Rights to the Use of All Water, 2002 MT 216, ¶ 56, 311 Mont. 327, 55 P.3d 396; see also § 85-2-311(1)(d), MCA. This limitation springs from a fundamental tenet of western water law - that an appropriator has a right only to that amount of water historically put to beneficial use-developed in concert with the rationale that each subsequent appropriator "is entitled to have the water flow in the same manner as when he located," and the appropriator may insist that prior appropriators do not affect adversely his rights. Spokane Ranch & Water Co. v. Beatty, 37 Mont. 342, 351, 96 P. 727, 731 (1908)….
>
> We do not dispute this interrelationship between historic consumptive use, return flow, and the amount of water to which an appropriator is entitled as limited by his past beneficial use.

Hohenlohe v. DNRC, 2010 MT 203, ¶¶ 43, 45; see also Town of Manhattan v. DNRC, Cause No. DV-09-872C, Montana Eighteenth Judicial District Court, *Order Re Petition for Judicial Review,* (2011) Pg. 9.

109. The extent of the historic beneficial use must be determined in a change case. E.g., McDonald; Hohenlohe ¶ 43; Quigley; Application for Water Rights in Rio Grande County, 53 P.3d 1165, 1170 (Colo. 2002); Santa Fe Trail Ranches Property Owners Ass'n v. Simpson, 990 P.2d 46, 55 -57 (Colo.,1999); *City of Bozeman* (DNRC), *supra* ("the doctrine of historic use gives effect to the implied limitations read into every decreed right that an appropriator has no right to waste water or to otherwise expand his appropriation to the detriment of juniors"). As a point of clarification, a claim filed for an existing water right in accordance with Mont. Code Ann. § 85-2-221 constitutes *prima facie* proof of the claim only for the purposes of the adjudication pursuant to Title 85, Chapter 2, Part 2. The claim does not constitute *prima facie* evidence of

historical use for the purposes of a change in appropriation proceeding before the Department under § 85-2-402, MCA. Importantly, irrigation water right claims are also not decreed with a volume and are, thus, limited by the Water Court to their "historic beneficial use." § 85-2-234, MCA. Town of Manhattan v. DNRC, Cause No. DV-09-872C, Montana Eighteenth Judicial District Court, *Order Re Petition for Judicial Review,* (2011) Pg. 11 (proof of historic use is required even where a water right is decreed).

110. The Department is within its authority to put a volume on a change authorization even where there is no volume on the Statement of Claim. The placement of a volume on the change authorization is not an "adjudication" of the water right. Hohenlohe ¶¶ 30-31.

111. Consumptive use of water may not increase when an existing water right is changed. Town of Manhattan v. DNRC, Cause No. DV-09-872C, Montana Eighteenth Judicial District Court, *Order Re Petition for Judicial Review,* (2011) Pg. 9; *In the Matter of Application to Change a Water Right No. 40M 30005660 By Harry Taylor II and Jacqueline R. Taylor*, (DNRC Final Order 2005); *In The Matter of Application to Change a Water Right No. 40A 30005100 by Berg Ranch Co./Richard Berg*, DNRC Proposal For Decision (2005) (Final Order adopted findings of fact and conclusions of law in proposal for decision*); In the Matter of Application to Change a Water Right No. 41I 30002512 by Brewer Land Co, LLC*, DNRC Proposal For Decision (2003) (Final Order adopted findings of fact and conclusions of law in proposal for decision); see also Quigley. An increase in consumptive use constitutes a new appropriation. Town of Manhattan v. DNRC, Cause No. DV-09-872C, Montana Eighteenth Judicial District Court, *Order Re Petition for Judicial Review* (2011) Pg. 9 (*citing* Featherman v. Hennessy, (1911) 43 Mont. 310, 316-17).

In a change proceeding, the *consumptive* use of the historical right has to be determined:

> In a reallocation [change] proceeding, both the actual historic consumptive use and the expected consumptive use resulting from the reallocation [change] are estimated. Engineers usually make these estimates.
> With respect to a reallocation [change], the engineer conducts an investigation to determine the historic diversions and the historic consumptive use of the water subject to reallocation [change]. This investigation involves an examination of historic use over a period that may range from 10 years to several decades, depending on the value of the water right being reallocated [changed].
> ....

> When reallocating [changing] an irrigation water right, the quantity and timing of historic consumptive use must be determined in light of the crops that were irrigated, the relative priority of the right, and the amount of natural rainfall available to and consumed by the growing crop.
> ....
> Expected consumptive use after a reallocation [change] may not exceed historic *consumptive* use if, as would typically be the case, other appropriators would be harmed. Accordingly, if an increase in consumptive use is expected, the quantity or flow of reallocated [changed] water is decreased so that actual historic consumptive use is not increased.

2 Water and Water Rights at § 14.04(c)(1); see also, Basin Elec. Power Co-op. v. State Bd. of Control, 578 P.2d 557, 564 -566 (Wyo,1978) (a water right holder may not effect a change of use transferring more water than he had historically consumptively used; regardless of the lack of injury to other appropriators, the amount of water historically diverted under the existing use, the historic rate of diversion under the existing use, the historic amount consumptively used under the existing use, and the historic amount of return flow must be considered.). The Department can request consumptive use information from an applicant. Hohenlohe ¶¶ 51, 68-69.

112. Denial of a change in appropriation in whole or part does not affect the exercise of the underlying right(s). The water right holder can continue to exercise the underlying right, unchanged as it has historically. The Department's change process only addresses the water right holder's ability to make a different use of that existing right. E.g., Town of Manhattan v. DNRC, Cause No. DV-09-872C, Montana Eighteenth Judicial District Court, *Order Re Petition for Judicial Review,* (2011) Pg. 8; *In the Matter of Application to Change Appropriation Water Right No.41F-31227 by T-L Irrigation Company* (DNRC Final Order 1991).

113. The Department may take notice of judicially cognizable facts and generally recognized technical or scientific facts within the Department's specialized knowledge. ARM 36.12.221(4).

Historical Use:

FINDINGS OF FACT

This change application proposes to retire 133.2 acres of land from irrigation. Portions of four water rights are being changed: 41F 14211-00, 41F 15336-00, 41F 15345-00, and 41F 15348-00. These rights are supplemental with each other and with 13 other rights.

114. Table 11 lists all supplemental water rights. The identical overlapping place of use is 770 acres located in Sections 18, 19, 20, 21, 28, 29, and 33, in T5 S, R1 E, Madison County, and

the period of use for all 17 water rights is May 1 through October 31. These seventeen water rights have a combined flow rate that totals 16.25 GPM/acre, which is under the general adjudication guideline of 17 GPM/acre. This total acreage figure of 770 acres reflects the practice of combining several water rights and using them as a group on the irrigated property owned by the claimant. Figure 1 shows the acreage being retired against a background of the 1954 Madison County Water Resources Survey.

Table 11: Braxton Ranch Overlapping Jack Creek Irrigation Water Rights

WR No. (41F-)	Source	Priority Date	Flow (CFS)	Volume (AF)	Acreage
14211	Jack Creek	4/1/1865	1.5	(not decreed)	770
15336	Jack Creek	4/15/1883	2.5	750	770
15337	Jack Creek	6/1/1887	0.75	225	770
15338	Jack Creek	5/1/1898	1.25	375	770
15339	Jack Creek	4/1/1884	0.5	150	770
15340	Jack Creek	6/1/1903	0.375	113	770
15341	Jack Creek	6/1/1903	2.5	750	770
15342	Jack Creek	6/1/1903	2.5	750	770
15343	Jack Creek	6/1/1903	2.5	750	770
15344	Jack Creek	5/1/1888	1.5	150	770
15345	Jack Creek	5/1/1888	2.5	750	770
15346	Jack Creek	4/15/1900	1.25	375	770
15347	Jack Creek	6/1/1903	0.75	225	770
15348	Jack Creek	10/1/1865	1.75	525	770
15349	Jack Creek	7/1/1901	5	1500	770
15350	Jack Creek	5/1/1866	0.25	75	770
15351	Jack Creek	4/1/1889	0.5	150	770

Notes:
1. Grey highlighted fields are water rights involved in this change application.
2. All rights have period of use from May 1 to October 31.

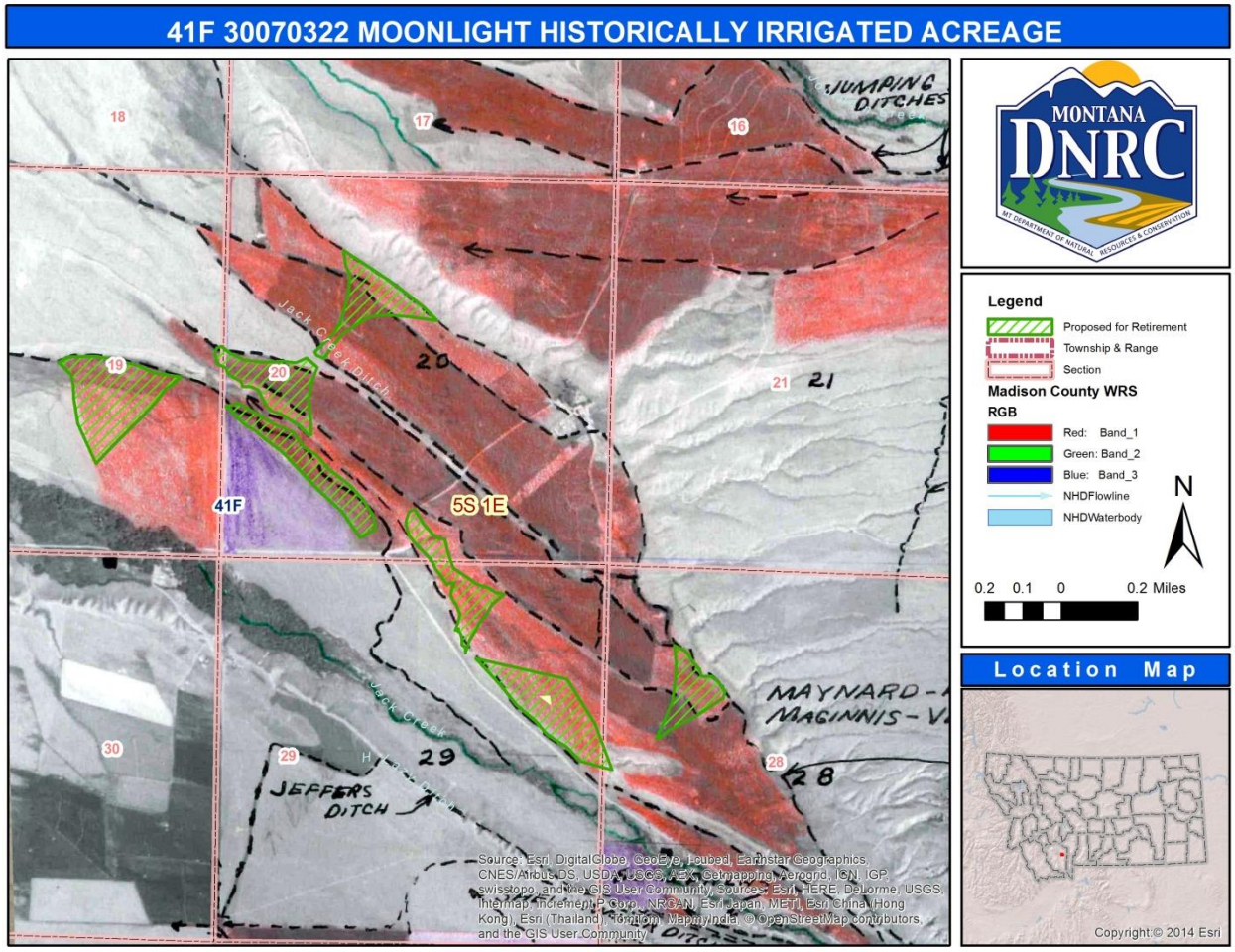

Figure 1: Acreage proposed for retirement shown against the 1954 Madison County Water Resources Survey.

115. The Applicant elected not to use the Department's historical use rule, ARM 36.12.1902. Instead, they submitted Historical Use Addenda for each water right being changed. They submitted extensive historical documentation relating to the irrigated acreage, ditch and diversion infrastructure, and interviews with previous ranch managers who had firsthand knowledge of historical use dating back to 1971. They based the historical use calculations on the specific types of crop being grown and the specific patterns of use on the Braxton Ranch. Additionally, the Department's April 8, 2011, Amended Statement of Opinion previously addressed the historical use of these rights. The Department found a consumptive use value of 1.17 AF/acre, which is an average of 1.24 AF/acre for alfalfa and 1.10 AF/acre for grass. This value is based on information from Jim Allison, previous ranch manager 1971-1988, that the

primary crop rotated between alfalfa and pasture grass. A narrative of historic operation by Jim Allison was provided. Based on this evidence, the acreage being removed was historically flood-irrigated and water diversions were never cut back at this diversion for this acreage. The Madison County Water Resources Survey, the USDA 1979 aerial photo, and a DNRC site visit associated with previous change application 41F 30031144 support the historical use of water as full-service irrigation on the 133.2 acres being removed in the present Change Application. The acreage of 133.2 multiplied by 1.17 AF/ac equals the consumptive use retired of 155.77 AF.

116. The Statement of Opinion for 41F 30031144 weighted the flow rate and volume to be retired. The Technical Report for this Change Application performed the same analysis and applied it to the 133.2 acres being retired. Table 12 is reproduced from the Technical Report and shows this summary.

Table 12: Weighting of Water Rights with Flows and Volumes Applied to Retired 133.2 Acres

Maximum Historical Values for Entire Water Right					Proportional Values for 133.2 Acres[2]		
Water Right Number	Flow Rate	Weighted Average of Flow Rate	Claimed Volume	Weighted Average of Volume	Flow Rate Retired	Weighted Diverted Volume	Weighted Consumptive Volume
(41F)	*(CFS)*	*(-)*	*(AF)*	*(-)*	*(CFS)*	*(AF)*	*(AF)*
14211	1.5	0.18	638[1]	0.24	0.08	36.56	28.33
15336	2.5	0.30	750	0.28	0.13	60.94	47.20
15345	2.5	0.30	750	0.28	0.13	60.94	47.20
15348	1.75	0.22	525	0.20	0.09	42.66	33.04
Totals =	8.25	1.00	2,025	1.00	0.43	201.10	155.77

Notes: [1]No volume was decreed for 41F 14211-00, but the claimed diverted volume was 638 AF. This value was employed for the purposes of calculating weighted averages of the volumes.

[2]For the values proportional to the 133.2 acres, flow rates and diverted and consumptive volumes were calculated in proportion to the historical flow rate. The original change of these water rights (41F 30031144) retired a diverted volume of 85 AF for the 56.3 acres that were retired, which equates to 1.51 AF per acre. Applied to the 133.2 acres being retired in this application, the corresponding diverted volume is 133.2 ac x 1.51 AF/ac = 201.1 AF. This total volume of 201.1 AF was then divided proportionately based on flow rate, as described.

CONCLUSIONS OF LAW

117. Applicant seeks to change existing water rights represented by its Water Right Claims. The "existing water rights" in this case are those as they existed prior to July 1, 1973, because no changes could have been made to those rights after that date without the Department's

approval. § 85-2-402(1), MCA; Royston, supra; Town of Manhattan v. DNRC, Cause No. DV-09-872C, Montana Eighteenth Judicial District Court, *Order Re Petition for Judicial Review,* (2011) Pg. 7; cf. General Agriculture Corp. v. Moore (1975), 166 Mont. 510, 534 P.2d 859 (limited exception for perfection). Thus, the focus in a change proceeding is what those rights looked like and how they were exercised prior to July 1, 1973. E.g., Matter of Clark Fork River Drainage Area (1992), 254 Mont. 11, 17, 833 P.2d 1120; 85-2-102(12)("Existing right" or "existing water right" means a right to the use of water that would be protected under the law as it existed prior to July 1, 1973). An applicant can change only that to which it has a perfected right. E.g., McDonald, supra; Quigley, supra; Town of Manhattan v. DNRC, Cause No. DV-09-872C, Montana Eighteenth Judicial District Court, *Order Re Petition for Judicial Review,* (2011) Pg. 9 (the rule that one may change only that to which it has a right is a fundamental tenet of Montana water law and imperative to MWUA change provisions, *citing* Featherman v. Hennessy, (1911) 43 Mont. 310, and Quigley v. McIntosh, (1940) 110 Mont. 495); see also In re Application for Water Rights in Rio Grande County 53 P.3d 1165, 1170 (Colo. 2002) (while the enlargement of a water right, as measured by historic use, may be injurious to other rights, it also simply does not constitute a permissible "change" of an existing right); Robert E. Beck, 2 Water and Water Rights at § 16.02(b) at p. 271 (issues of waste and historic use, as well as misuse … properly be considered by the administrative official or water court when acting on a reallocation application," (citations omitted)); *In the Matter of Application for Change in Appropriation of Water Right No. 1339988-40A, 1339989-40A, and 50641-40A by Careless Creek Ranch* (DNRC Final Order 1988)(where there is water at new point of diversion, more often than not purpose of change is to pick up that extra water, application must be made for a new water right to cover the extra water; it cannot be appropriated under the guise of a change in the old right).

118. The Department as fact finder in a change proceeding must have the required information to evaluate historic use of a water right to determine whether the change will result in expansion of the original right or adversely affect water users. The Department cannot determine whether there will be adverse effect to other appropriators from a different use of water until it knows how the water has been historically used, including the pattern of use. Town of Manhattan v. DNRC, Cause No. DV-09-872C, Montana Eighteenth Judicial District

Court, *Order Re Petition for Judicial Review,* (2011) Pg.13 (upholding ARM 36.12.1902, as reflecting basic water law principles).

The requirement that a water user establish the parameters and pattern of use of a water right through evidence of historic use is a fundamental principle of Montana water law that serves to ensure that a change does not expand a water right (i.e. bootstrap a new use with a senior priority date) or adversely affect other water users. Evidence of historic use serves the important function of protecting other water users who have come to rely upon maintaining surface and ground water conditions for their livelihood. Id. at Pg. 14; *In the Matter of Change Application No. 43D-30002264 by Chester and Celeste Schwend* (DNRC Final Order 2008)(applicant must provide evidence on actual historic use of water right regardless of decree; statement that "we will not be using any more water than was used before" is not sufficient).

119. Water Resources Surveys were authorized by the 1939 legislature. 1939 Mont. Laws Ch. 185, § 5. Since their completion, Water Resources Surveys have been invaluable evidence in water right disputes and have long been relied on by Montana courts. In re Adjudication of Existing Rights to Use of All Water in North End Subbasin of Bitterroot River Drainage Area in Ravalli and Missoula Counties (1999), 295 Mont. 447, 453, 984 P.2d 151, 155 (Water Resources Survey used as evidence in adjudicating of water rights); Wareing v. Schreckendgust (1996), 280 Mont. 196, 213, 930 P.2d 37, 47 (Water Resources Survey used as evidence in a prescriptive ditch easement case); Olsen v. McQueary (1984), 212 Mont. 173, 180, 687 P.2d 712, 716 (judicial notice taken of Water Resources Survey in water right dispute concerning branches of a creek).

120. The Department has adopted a rule providing for the calculation of historic consumptive use where the applicant proves by a preponderance of the evidence that the acreage was historically irrigated. ARM 36.12.1902.

If an applicant seeks more than the historic consumptive use as calculated by ARM 36.12.1902, the applicant bears the burden of proof to demonstrate the amount of historic consumptive use by a preponderance of the evidence. The actual historic use of water could be less than the optimum utilization represented by the calculated duty of water in any particular case. E.g., Application for Water Rights in Rio Grande County 53 P.3d 1165 (Colo., 2002) (historical use must be quantified to ensure no enlargement); *In the Matter of Application to*

Change Water Right No. 41H 1223599 by MGRR #1, LLC., (DNRC Final Order 2005); Orr v. Arapahoe Water and Sanitation Dist. 753 P.2d 1217, 1223 -1224 (Colo., 1988)(historical use of a water right could very well be less than the duty of water); Weibert v. Rothe Bros., Inc., 200 Colo. 310, 317, 618 P.2d 1367, 1371 - 1372 (Colo., 1980) (historical use could be less than the optimum utilization "duty of water").

121. While evidence may be provided that a particular parcel was irrigated, the actual amount of water historically diverted and consumed is critical. E.g., *In the Matter of Application to Change Water Right No. 41H 1223599 by MGRR #1, LLC.*, supra. The Department cannot assume that a parcel received the full duty of water or that it received sufficient water to constitute full service irrigation for optimum plant growth. Even when it seems clear that no other rights could be affected solely by a particular change in the location of diversion, it is essential that the change also not enlarge an existing right. Trail's End Ranch, L.L.C. v. Colorado Div. of Water Resources 91 P.3d 1058, 1063 (Colo., 2004) (*citing* Application for Water Rights in Rio Grande County, 53 P.3d at 1168 and Empire Lodge Homeowners' Ass'n v. Moyer, 39 P.3d 1139, 1147 (Colo., 2001).

122. Absent quantification of annual volume historically consumed, no protective condition limiting annual volume delivered can be placed on a Change Authorization, and without such a condition, the evidence of record will not sustain a conclusion of no adverse effect to prior . . . appropriators*." In the Matter of the Application for Change of Appropriation Water Rights Nos. 101960-41S and 101967-41S by Keith and Alice Royston*, COL No. 8 (DNRC Final Order 1989), *affirmed* (1991), 249 Mont. 425, 428, 816 P.2d 1054, 1057; *In the Matter of the Application of Beneficial Water Use Permit Number 41H 30003523 and the Application for Change No. 41H 30000806 by Montana Golf Enterprises, LLC.*, DNRC Proposal for Decision (November 19, 2003) (proposed decision denied change for lack of evidence of historical use; application subsequently withdrawn); see also Hohenlohe ¶¶ 43, 45; Application for Water Rights in Rio Grande County (2002), supra; *In the Matter of Application to Change Water Right No. 41H 1223599 by MGRR #1, LLC.*, supra.

123. The Department has the authority to consider waste in determining a volume for change in a water right.

> *The Department retains the discretion to take into account reasonable or wasteful use and to amend or modify a proposed change of use application according to those determinations. See Bostwick, 2009 MT 181, ¶ 21, 351 Mont. 26, 208 P.3d 868*.

Hohenlohe ¶ 71.

124. Applicant may proceed under ARM 36.12.1902, the Department's historic consumptive use rule for the calculation of consumptive use or may present its own evidence of historic beneficial use. In this case Applicant has not elected to proceed under ARM 36.12.1902, instead providing additional information and a Historical Water Use Addendum for each right being changed. (FOF No. 115)

125. The Applicant has proven by a preponderance of the evidence that the historical use for the 133.2 acres of each of the Statements of Claim being retired is 36.56 AF diverted volume, 28.33 AF consumptive volume, 0.08 CFS flow rate for 41F 14211-00; 60.94 AF diverted volume, 47.20 AF consumptive volume, 0.13 CFS flow rate for 41F 15336-00; 60.94 AF diverted volume, 47.20 AF consumptive volume, 0.13 CFS flow rate for 41F 15345-00; and 42.66 AF diverted volume, 33.04 AF consumptive volume, 0.09 CFS flow rate for 41F 15348-00. (FOF Nos. 0 – 116)

Adverse Effect:

FINDINGS OF FACT

126. The Applicant is proposing to change the purpose, place of use, and point of diversion for a portion of these water rights. A portion of the historically consumed volume will be changed to a mitigation purpose and will be left instream at the Braxton Ranch's headgate on Jack Creek.

127. The old consumptive use is equal to the new proposed consumptive use. The same volume of water that was historically consumed by crop production will now be left instream to mitigate surface water depletions caused by pumping of the six wells involved in the combined permit application.

128. A Parshall flume will be used to measure the water that Braxton Ranch is diverting, which will show the amount they are not diverting – the mitigation water that is being left instream in this change. A condition will be placed on this change authorization requiring weekly measurements of diverted/non-diverted water at the furthest upstream and furthest downstream Braxton Ranch headgates on Jack Creek. The Applicants have the ability to protect this instream amount at all four headgates that Braxton Ranch owns, a stream distance of approximately 2 miles. Consistent with the previous mitigation change involving these water

rights, 41F 30031144, a measurement condition for the water left instream in Jack Creek is incorporated into the Department's analysis, as shown below.

WATER MEASUREMENT INFORMATION
THE APPROPRIATOR SHALL INSTALL A DEPARTMENT APPROVED MEASURING DEVICE AT THE CURRENT ACTIVE POINT OF DIVERSION FOR THESE RIGHTS TO ENSURE THE MITIGATION WATER REMAINS INSTREAM. THIS CHANGE SHALL NOT BE EXERCISED UNTIL THE REQUIRED MEASURING DEVICE IS IN PLACE AND OPERATING. IF MORE THAN ONE POINT OF DIVERSION IS USED, APPROPRIATOR SHALL INSTALL DEPARTMENT APPROVED MEASURING DEVICES ON THE LOWERMOST POINT OF DIVERSION AND THE UPPERMOST POINT OF DIVERSION. ON A FORM PROVIDED BY THE DEPARTMENT, THE APPROPRIATOR SHALL KEEP A WRITTEN WEEKLY RECORD OF THE VOLUME OF MITIGATION WATER NOT DIVERTED AND LEFT INSTREAM, INCLUDING THE PERIOD OF TIME. RECORDS SHALL BE SUBMITTED BY NOVEMBER 30 OF EACH YEAR AND UPON REQUEST BY THE DEPARTMENT AT OTHER TIMES DURING THE YEAR. FAILURE TO SUBMIT RECORDS MAY BE CAUSE FOR REVOCATION OF A PERMIT OR CHANGE. THE RECORDS MUST BE SENT TO THE WATER RESOURCES BOZEMAN REGIONAL OFFICE. THE APPROPRIATOR SHALL MAINTAIN THE MEASURING DEVICE SO IT ALWAYS OPERATES PROPERLY AND MEASURES THE VOLUME ACCURATELY.

129. The proposed change meets the requirements in the Department's April 1, 2016, "Policy Memo – Return Flows." As required by the memo, (1) the Department considered historical use and determined that the change would not constitute an enlargement of flow rate and consumptive use over the historic use of the original water right; (2) The Department properly applied the standards in ARM 36.12.1902 to determine the historical use; and (3)(b) The Department analyzed the change to determine that water is left instream so historically diverted flows are available during the historic period of diversion either below the point of diversion or where return flows historically returned to the source. The proposed changes for this water right meet elements (1) – (3), so a monthly return flow analysis of the mitigation change will not be performed, absent a valid objection. This was confirmed in an August 14, 2020, email by Department hydrogeologist Attila Folnagy.

130. A condition of the concurrent permit application requires that the 133.2 acres being analyzed in this change application be permanently removed from irrigation and not be irrigated with any supplemental rights. The remaining 13 rights, which will still have the 133.2 acres described in the place of use, cannot be used on the removed 133.2 acres. The change authorization is valid only if the specified 133.2 acres are not irrigated, and if irrigation ever

occurs on the described 133.2 acres, it will be cause for revocation of this change authorization by the Department. The permit for which this change authorization would provide mitigation is expressly conditioned on the mitigation being in place. Consequently, if the 133.2 acres is irrigated, the permit cannot be exercised. This will ensure that the required mitigation water is left instream to mitigate adverse effect.

IMPORTANT INFORMATION
THIS CHANGE AUTHORIZATION IS SUBJECT TO THE PERMANENT REMOVAL OF 133.2 ACRES FROM IRRIGATION AT LOCATIONS IN THE EAST HALF OF SECTION 19, SECTION 20, THE NORTHEAST QUARTER OF SECTION 29, AND THE WESTERN HALF OF SECTION 28, ALL T5S, R1E, MADISON COUNTY (SEE FILE FOR MAP OF SPECIFIC ACREAGE). IRRIGATION OF THESE 133.2 ACRES AFTER THIS AUTHORIZATION IS ISSUED WILL BE CAUSE FOR REVOCATION OF THIS AUTHORIZATION AND THE ASSOCIATED PERMIT 41F 30070321. APPLICANTS WILL BE REQUIRED YEARLY TO SUBMIT A PHOTO TAKEN DURING THE MIDDLE OF IRRIGATION SEASON SHOWING THAT THE ACREAGE REMAINED RETIRED FOR THAT YEAR.

131. There are 17 total water rights that are supplemental on the acreage proposed for retirement. A condition of the permit and authorization will be that the acreage retired cannot be irrigated under any supplemental rights. Land shall be open for inspection to confirm the non-irrigation of the entire retired acreage. This will ensure that more water is not used than was historically.

132. The mitigation place of use is being changed to one of the Braxton Ranch's headgates, where water was historically diverted. The Applicant will not be able to call water rights it could not previously call (a former ranch manager submitted a signed affidavit affirming that water was always available to the ranch and that they never needed to make a call). They are not increasing their access to water (a former ranch manager submitted a signed affidavit affirming that water was always available at the headgate). This change will not alter the historic timing of diversion, as an existing ranch headgate will be used within the historical period of diversion.

CONCLUSIONS OF LAW

133. The Applicant bears the affirmative burden of proving that proposed change in appropriation right will not adversely affect the use of the existing water rights of other persons or other perfected or planned uses or developments for which a permit or certificate has been issued or for which a state water reservation. § 85-2-402(2)(a), MCA. Royston, supra. It is the

applicant's burden to produce the required evidence. *In the Matter of Application to Change Water Right No. 41H 1223599 by MGRR #1, LLC.*, (DNRC Final Order 2005).

134. Prior to the enactment of the Water Use Act in 1973, the law was the same in that an adverse effect to another appropriator was not allowed. Holmstrom Land Co., Inc., v. Newlan Creek Water District (1979), 185 Mont. 409, 605 P.2d 1060, *rehearing denied*, (1980), 185 Mont. 409, 605 P.2d 1060, *following* Lokowich v. Helena (1913), 46 Mont. 575, 129 P. 1063; Thompson v. Harvey (1974), 164 Mont. 133, 519 P.2d 963 (plaintiff could not change his diversion to a point upstream of the defendants because of the injury resulting to the defendants); McIntosh v. Graveley (1972), 159 Mont. 72, 495 P.2d 186 (appropriator was entitled to move his point of diversion downstream, so long as he installed measuring devices to ensure that he took no more than would have been available at his original point of diversion); Head v. Hale (1909), 38 Mont. 302, 100 P. 222 (successors of the appropriator of water appropriated for placer mining purposes cannot so change its use as to deprive lower appropriators of their rights, already acquired, in the use of it for irrigating purposes); Gassert v. Noyes (1896), 18 Mont. 216, 44 P. 959 (after the defendant used his water right for placer mining purposes the water was turned into a gulch, whereupon the plaintiff appropriated it for irrigation purposes; the defendant then changed the place of use of his water right, resulting in the water no longer being returned to the gulch - such change in use was unlawful because it absolutely deprived the plaintiff of his subsequent right).

The cornerstone of an evaluation of adverse effect to other appropriators is the determination of historic use of water. One cannot determine whether there is adverse effect to another appropriator until one knows what the historic water right is to be changed. It is a fundamental part of Montana and western water law that the extent of a water right is determined by reference to the historic beneficial use of the water right. McDonald; Town of Manhattan v. DNRC, Cause No. DV-09-872C, Montana Eighteenth Judicial District Court, *Order Re Petition for Judicial Review* (2011) Pg.13; *City of Bozeman* (DNRC), supra; Application for Water Rights in Rio Grande County, 53 P.3d 1165, 1170 (Colo. 2002). The Montana Supreme Court has explained:

> An appropriator historically has been entitled to the greatest quantity of water he can put to use. Sayre v. Johnson, 33 Mont. 15, 18, 81 P. 389, 390 (1905). The requirement that the use be both beneficial and reasonable, however, proscribes this tenet. In re Adjudication of Existing Rights to the Use of All Water, 2002 MT 216, ¶ 56, 311 Mont.

> 327, 55 P.3d 396; see also § 85-2-311(1)(d), MCA. This limitation springs from a fundamental tenet of western water law-that an appropriator has a right only to that amount of water historically put to beneficial use-developed in concert with the rationale that each subsequent appropriator "is entitled to have the water flow in the same manner as when he located," and the appropriator may insist that prior appropriators do not affect adversely his rights. Spokane Ranch & Water Co. v. Beatty, 37 Mont. 342, 351, 96 P. 727, 731 (1908)….
>
> The question of adverse effect under §§ 85-2-402(2) and -408(3), MCA, implicates return flows. A change in the amount of return flow, or to the hydrogeologic pattern of return flow, has the potential to affect adversely downstream water rights. There consequently exists an inextricable link between the "amount historically consumed" and the water that re-enters the stream as return flow…
>
> We do not dispute this interrelationship between historic consumptive use, return flow, and the amount of water to which an appropriator is entitled as limited by his past beneficial use.

Hohenlohe ¶¶ 43-45.

135. Consumptive use of water may not increase when an existing water right is changed. E.g., Town of Manhattan v. DNRC, Cause No. DV-09-872C, Montana Eighteenth Judicial District Court, *Order Re Petition for Judicial Review,* (2011) Pg.9; *In the Matter of Application to Change a Water Right No. 40M 30005660 by Harry Taylor II And Jacqueline R. Taylor*, (DNRC Final Order 2005); *In the Matter of Application to Change a Water Right No. 41I 30002512 by Brewer Land Co, LLC,* DNRC Proposal For Decision adopted by Final Order (2003). Applicant must provide evidence of historical amount consumed and the amount to be consumed under the proposed change. *In the Matter of the Application of Beneficial Water Use Permit Number 41H 30003523 and the Application for Change No. 41H 30000806 by Montana Golf Enterprises, LLC.*, DNRC Proposal for Decision (2003) (application subsequently withdrawn); *In the Matter of Application to Change A Water Right No. 43B 30002710 by USA (Dept. of Agriculture – Forest Service*) (DNRC Final Order 2005); *In the Matter of Application No. 76H-30009407 to Change Water Right Nos. 76H-108772 and 76H-1-8773 by North Corporation* (DNRC Final Order 2008*).* #It is well settled in Montana and western water law, that once water leaves the control of the appropriator whether through seepage, percolating, surface, or waste waters," and reaches a water course, it is subject to appropriation. E.g., Rock Creek Ditch & Flume Co. v. Miller (1933), 93 Mont. 248, 17 P.2d 1074, 1077; Newton v. Weiler (1930), 87 Mont. 164, 286 P. 133; Popham v. Holloron (1929), 84 Mont. 442, 275 P. 1099, 1102; Galiger v. McNulty (1927) 80 Mont. 339,

260 P. 401; Head v. Hale (1909), 38 Mont. 302, 100 P. 222; Alder Gulch Con. Min. Co. v. King (1886), 6 Mont. 31, 9 P. 581; Doney, *Montana Water Law Handbook* (1981) [hereinafter Doney] p.22 (if return flows not part of original appropriation then it is available for appropriation by others); see also Hidden Hollow Ranch v. Fields, 2004 MT 153, 321 Mont. 505, 92 P.3d 1185. An intent to capture and reuse return flows must be manifested at the time of the appropriation. E.g., Rock Creek Ditch and Flume, 17 P.2d at 1080; Albert Stone, *Montana Water Law* (1994) p. 84. This is consistent with the cornerstone of the prior appropriation doctrine that beneficial use is the basis, the measure and limit of a water right. E.g., McDonald v. State (1986), 220 Mont. 519, 722 P.2d 598; Toohey v. Campbell (1900), 24 Mont. 13, 60 P. 396. Return flows are not part of the water right of the appropriator changing their water right and an appropriator changing their water right is not entitled to return flows in a change in appropriation. Generally, return flow is water that is not consumed or is lost to the system. See also, Doney, p. 21.

The Montana Supreme Court also recently recognized the fundamental nature of return flows to Montana's water sources in addressing whether the Mitchell Slough was a perennial flowing stream, given the large amount of irrigation return flow which feeds the stream. The Court acknowledged that the Mitchell's flows are fed by irrigation return flows available for appropriation. Bitterroot River Protective Ass'n, Inc. v. Bitterroot Conservation Dist. 2008 MT 377, ¶¶ 22, 31, 43, 346 Mont. 508, ¶¶ 22, 31,43, 198 P.3d 219, ¶¶2 2, 31,43, *citing* Hidden Hollow Ranch v. Fields, 2004 MT 153, 321 Mont. 505, 92 P.3d 1185; see discussion in Hohenlohe, supra.

136. The analysis of return flow is a critical component of a change in appropriation and specifically whether a change will cause adverse effect to another appropriator. A change can affect return flow patterns and timing, affecting other water users. E.g., I*n the Matter of Application to Change Appropriation Water Right No.41F-31227 by T-L Irrigation Company* (DNRC Final Order 1991). An applicant for a change in appropriation must analyze return flows (amount, location, and timing) to prove that the proposed change does not adversely affect other appropriators who may rely on those return flows as part of their water supply to exercise their water rights. E.g., Royston, supra; *In the Matter of Change Application No. 43D-30002264 by Chester and Celeste Schwend* (DNRC Final Order 2008) (applicant must show that significant changes in timing and location of historic return flow will not be adverse effect.) The

level of analysis of return flow will vary depending on the nature of the change application. Hohenlohe ¶¶ 45-46, 55-56.

137. The Applicant has proven by a preponderance of the evidence that the proposed change in appropriation right will not adversely affect the use of the existing water rights of other persons or other perfected or planned uses or developments for which a permit or certificate has been issued or for which a state water reservation has been issued. § 85-2-402(2)(b), MCA. (FOF Nos. 126 – 132)

Adequate Diversion

FINDINGS OF FACT

138. This Application proposes to change the subject water rights to the purpose of mitigation. Pursuant to §85-2-402 (2)(b)(iii), MCA, changes for mitigation are not required to prove by a preponderance of the evidence that the proposed means of diversion, construction, and operation of the appropriation works are adequate.

CONCLUSIONS OF LAW

139. Pursuant to § 85-2-402 (2)(b), MCA, except for a change in appropriation right for instream flow to protect, maintain, or enhance streamflows to benefit the fishery resource pursuant to § 85-2-436, MCA, or a temporary change in appropriation right authorization to maintain or enhance streamflows to benefit the fishery resource pursuant to § 85-2-408, MCA, or a change in appropriation right to instream flow to protect, maintain, or enhance streamflows pursuant to § 85-2-320,MCA, the Applicant must prove by a preponderance of the evidence that the proposed means of diversion, construction, and operation of the appropriation works are adequate.

140. Pursuant to § 85-2-402(2)(b), MCA, the Applicant is not required to prove that the proposed means of diversion, construction, and operation of the appropriation works are adequate because this application involves (iii) a change in appropriation right pursuant to § 85-2-420, MCA, for mitigation or marketing for mitigation. (FOF No. 138)

Beneficial Use

FINDINGS OF FACT

141. Mitigation is recognized as a beneficial use in the State of Montana.

142. The Applicant proposes to use water for mitigation in order to offset depletions to Jack Creek that would occur from the pumping of Provisional Permit 41F 30070321. Total depletions under the permit were calculated as a constant year-round flow rate of 96.6 GPM and an annual volume of 155.77 AF. In order to deliver the 155.77 AF within the historical period of diversion of these water rights, May 1 – October 31, the corresponding flow rate left instream is 0.43 CFS. The proposed change of the four water rights is necessary to provide 155.77 AF of water for the beneficial use of mitigation.

CONCLUSIONS OF LAW

143. Under the change statute, § 85-2-402(2)(c), MCA, an Applicant must prove by a preponderance of the evidence the proposed use is a beneficial use. An appropriator may appropriate water only for a beneficial use. §§ 85-2-301 and 311(1)(d), MCA.

144. The analysis of the beneficial use criterion is the same for change authorizations under § 85-2-402, MCA, and new beneficial permits under § 85-2-311, MCA. The amount of water under a water right is limited to the amount of water necessary to sustain the beneficial use. E.g., Bitterroot River Protective Association v. Siebel*, Order on Petition for Judicial Review*, Cause No. BDV-2002-519, Montana First Judicial District Court (2003), *affirmed on other grounds*, 2005 MT 60, 326 Mont. 241, 108 P.3d 518; Worden v. Alexander (1939), 108 Mont. 208, 90 P.2d 160; Allen v. Petrick (1924), 69 Mont. 373, 222 P. 451; Quigley;.

The Department may issue a permit for less than the amount of water requested, but may not issue a permit for more water than is requested or than can be beneficially used without waste for the purpose stated in the application. §85-2-312, MCA; see also, McDonald; Toohey. Waste is defined to include the "application of water to anything but a beneficial use." § 85-2-102(23), MCA. An absence of evidence of waste does not prove the amount requested is for a beneficial use. E.g., *Stellick*, supra.

145. It is the Applicant's burden to prove the required criteria. Royston. A failure to meet that affirmative burden does not mean the criterion is met for lack of contrary evidence. E.g., *In the*

Matter of Application to Change Water Right No. 41H 1223599 by MGRR #1, LLC., (DNRC Final Order 2005).

146. The Applicant proposes to use water for mitigation which is a recognized beneficial use. § 85-2-102(4), MCA. The Applicant has proven by a preponderance of the evidence that mitigation is a beneficial use and that 155.77 acre-feet of diverted volume and a flow rate of 0.43 CFS left instream in Jack Creek is the amount needed to sustain the beneficial use. § 85-2-402(2)(c), MCA. (FOF Nos. 141 – 142)

Possessory Interest

FINDINGS OF FACT

147. This Application proposes to change the subject water rights to the purpose of mitigation. Pursuant to §85-2-402(2)(d)(iii), MCA, changes for mitigation are not required to prove by a preponderance of the evidence that they have a possessory interest in the property where the water is to be put to beneficial use.

CONCLUSIONS OF LAW

148. Pursuant to § 85-2-402(2)(d), MCA, except for a change in appropriation right for instream flow to protect, maintain, or enhance streamflows to benefit the fishery resource pursuant to § 85-2-436, MCA, or a temporary change in appropriation right authorization pursuant to § 85-2-408, MCA, or a change in appropriation right to instream flow to protect, maintain, or enhance streamflows pursuant to § 85-2-320, MCA, the Applicant must prove by a preponderance of the evidence that it has a possessory interest.

149. Pursuant to § 85-2-402(2)(d), MCA, the Applicant is not required to prove that they have a possessory interest in the property where the water is to be put to beneficial use because this application involves (iii) a change in appropriation right pursuant to § 85-2-420, MCA, for mitigation or marketing for mitigation. (FOF No. 147)

Discharge Permit

FINDINGS OF FACT

150. A discharge permit from the Department of Environmental Quality is not required. In a January 23, 2015, letter from Morrison-Maierle to the Department, the Applicant provided evidence that a discharge permit is not required.

CONCLUSIONS OF LAW

151. Sections 85-2-362(3) and 85-2-364, MCA require that an Applicant receive the appropriate water quality permits for a mitigation or an aquifer recharge plan pursuant to Title 75, chapter 5 MCA, as required by §§75-5-410 and 85-2-364, MCA, prior to the grant of beneficial water use permit application as part of a combined application under § 85-2-363, MCA. Applicant is not required to obtain a discharge permit under this requirement.

PRELIMINARY DETERMINATION

Subject to the terms and analysis in this Order, the Department preliminarily determines that this Combined Application for Beneficial Water Use Permit No. 41F 30070321 and Change 41F 30070322 should be **GRANTED**.

BENEFICIAL WATER USE PERMIT

The Department determines the Applicant may for the purposes of Beneficial Water Use Permit No. 41F 30070321 divert groundwater, by means of six wells, from January 1 to December 31 of each year, at a combined 405 GPM up to 274.9 AF per annum for municipal purposes between January 1 and December 31. The Applicant may use up to 233.8 AF of diverted volume for indoor domestic-type uses (domestic/residential, commercial, hotel) between January 1 – December 31. The Applicant may use up to 41.1 AF of diverted volume for irrigation of up to 28.94 acres of lawn and garden between April 1 – September 30. Table 13 summarizes the place of use, and Table 14 summarizes the points of diversion.

Table 13: Summary of Place of Use

ID	1/4	1/4	Sec
1	W2	SW	1
2	E2	NE	2
3	E2	NE	3
4	E2	SE	3
5		E2	9
6		SW	10
7		SE	10
8		NE	10
9			11
10		SW	12
11		NW	12
12	SW	NE	12
13	W2	SE	12
14			13
15			14
16			15
17	NE	NE	16
18			22
19			23
20			24
21		N2	26
Note: All T6 S, R2 E, Madison County.			

Table 14: Summary of Points of Diversion

Well Name	GWIC	Qtr	Section	Flow Rate (GPM)	Depth (ft)
Well # 2010-3	259359	NESESE	15	30	706
Well # 2010-4	259357	NESWNE	15	65	307
Well # 2010-5	259699	SWSWSE	15	30	565
Well # 2010-7	259361	SWNWNW	15	150	426
Well # 2008-6	288206	SENWSW	22	30	250
Well # 2007-4	279080	NWSENE	23	100	198
Note: All T6 S, R2 E, Madison County.					

The potentially affected surface water source is Jack Creek, tributary to the Madison River. Change No. 41F 30070322 will mitigate the affected reach. The water to mitigate the affected reach will be left instream at NWNESW of Section 33, T5 S, R1 E, Madison County at a constant flow rate of 0.43 CFS between May 1 – October 31 of each year, for a total of 155.77 AF per annum.

The application will be subject to the following conditions, limitations, or restrictions.

IMPORTANT INFORMATION – MITIGATION REQUIRED
THE APPROPRIATOR'S USE OF WATER UNDER THIS PERMIT IS CONDITIONED UPON THE 155.77 AC-FT OF MITIGATION VOLUME REQUIRED TO OFFSET ADVERSE EFFECTS FROM NET DEPLETION TO JACK CREEK. DIVERSION UNDER THIS PERMIT MAY NOT COMMENCE UNTIL THE MITIGATION PLAN AS SPECIFICALLY DESCRIBED AND APPROVED THROUGH CHANGE AUTHORIZATION 41F 30070322 IS LEGALLY IMPLEMENTED. DIVERSION UNDER THIS PERMIT, EXCEPT FOR EMERGENCY USE, MUST STOP IF MITIGATION AS HEREIN REQUIRED IN AMOUNT, LOCATION, AND DURATION CEASES.

WATER MEASUREMENT-INLINE FLOW METER REQUIRED
THE APPROPRIATOR SHALL INSTALL A DEPARTMENT APPROVED IN-LINE FLOW METER AT A POINT IN THE DELIVERY LINE APPROVED BY THE DEPARTMENT. WATER MUST NOT BE DIVERTED UNTIL THE REQUIRED MEASURING DEVICE IS IN PLACE AND OPERATING. ON A FORM PROVIDED BY THE DEPARTMENT, THE APPROPRIATOR SHALL KEEP A WRITTEN MONTHLY RECORD OF THE FLOW RATE AND VOLUME OF ALL WATER DIVERTED, INCLUDING THE PERIOD OF TIME. RECORDS SHALL BE SUBMITTED BY NOVEMBER 30 OF EACH YEAR AND UPON REQUEST AT OTHER TIMES DURING THE YEAR. FAILURE TO SUBMIT REPORTS MAY BE CAUSE FOR REVOCATION OF A PERMIT OR CHANGE. THE RECORDS MUST BE SENT TO THE WATER RESOURCES REGIONAL OFFICE. THE APPROPRIATOR SHALL MAINTAIN THE MEASURING DEVICE SO IT ALWAYS OPERATES PROPERLY AND MEASURES FLOW RATE AND VOLUME ACCURATELY.

AUTHORIZATION OF CHANGE IN APPROPRIATION RIGHT

Subject to the terms and analysis in this Preliminary Determination Order, the Department preliminarily determines that this Application to Change Water Right No. 41F 30070322 should be **GRANTED**.

The Applicant is authorized to change partially the purpose, place of use, and point of diversion for Statements of Claim 41F 14211-00, 41F 15336-00, 41F 15345-00, and 41F 15348-00. The new purpose is mitigation. The place of use is the point at which water is left instream, in the NWNESW of Section 33, T5 S, R1 E, Madison County. The point of diversion is the location at which water is left instream in Jack Creek, a point in the NWNESW of Section 33, T5

S, R1 E, Madison County. A volume of 155.77 AF per annum at a constant flow rate of 0.43 CFS between May 1 – October 31 shall be left instream at this point in Jack Creek.

The Application will be subject to the following conditions, limitations, or restrictions.

IMPORTANT INFORMATION

THIS CHANGE AUTHORIZATION IS SUBJECT TO THE PERMANENT REMOVAL OF 133.2 ACRES FROM IRRIGATION AT LOCATIONS IN THE EAST HALF OF SECTION 19, SECTION 20, THE NORTHEAST QUARTER OF SECTION 29, AND THE WESTERN HALF OF SECTION 28, ALL T5S, R1E, MADISON COUNTY (SEE FILE FOR MAP OF SPECIFIC ACREAGE). IRRIGATION OF THESE 133.2 ACRES AFTER THIS AUTHORIZATION IS ISSUED WILL BE CAUSE FOR REVOCATION OF THIS AUTHORIZATION AND THE ASSOCIATED PERMIT 41F 30070321. APPLICANTS WILL BE REQUIRED YEARLY TO SUBMIT A PHOTO TAKEN DURING THE MIDDLE OF IRRIGATION SEASON SHOWING THAT THE ACREAGE REMAINED RETIRED FOR THAT YEAR.

IMPORTANT INFORMATION

THIS CHANGE AUTHORIZATION PROVIDES MITIGATION WATER FOR BENEFICIAL USE PERMIT 41F 30070321. IF AT ANY TIME THE MITIGATION COMPONENT OF THIS CHANGE AUTHORIZATION IS NOT MET, WATER USE UNDER BENEFICIAL USE PERMIT 41F 30070321 MUST BE STOPPED. IF MITIGATION CANNOT BE MET, APPLICANTS WILL PROVIDE A REPORT TO DNRC DETAILING THE AMOUNT OF SHORTAGE OF MITIGATION WATER AND HOW THE PERMIT USE WAS STOPPED TO PREVENT ADVERSE EFFECT.

WATER MEASUREMENT INFORMATION

THE APPROPRIATOR SHALL INSTALL A DEPARTMENT APPROVED MEASURING DEVICE AT THE CURRENT ACTIVE POINT OF DIVERSION FOR THESE RIGHTS TO ENSURE THE MITIGATION WATER REMAINS INSTREAM. THIS CHANGE SHALL NOT BE EXERCISED UNTIL THE REQUIRED MEASURING DEVICE IS IN PLACE AND OPERATING. IF MORE THAN ONE POINT OF DIVERSION IS USED, APPROPRIATOR SHALL INSTALL DEPARTMENT APPROVED MEASURING DEVICES ON THE LOWERMOST POINT OF DIVERSION AND THE UPPERMOST POINT OF DIVERSION. ON A FORM PROVIDED BY THE DEPARTMENT, THE APPROPRIATOR SHALL KEEP A WRITTEN WEEKLY RECORD OF THE VOLUME OF MITIGATION WATER NOT DIVERTED AND LEFT INSTREAM, INCLUDING THE PERIOD OF TIME. RECORDS SHALL BE SUBMITTED BY NOVEMBER 30 OF EACH YEAR AND UPON REQUEST BY THE DEPARTMENT AT OTHER TIMES DURING THE YEAR. FAILURE TO SUBMIT RECORDS MAY BE CAUSE FOR REVOCATION OF A PERMIT OR CHANGE. THE RECORDS MUST BE SENT TO THE WATER RESOURCES BOZEMAN REGIONAL OFFICE. THE APPROPRIATOR SHALL MAINTAIN THE MEASURING DEVICE SO IT ALWAYS OPERATES PROPERLY AND MEASURES THE VOLUME ACCURATELY.

NOTICE

This Department will provide public notice of this Combined Application and the Department's Preliminary Determination to Grant pursuant to §§ 85-2-307, MCA. The Department will set a deadline for objections to this Combined Application pursuant to §§ 85-2-307, and -308, MCA. If this Combined Application receives no valid objection or all valid objections are unconditionally withdrawn, the Department will grant this Combined Application as herein approved. If this Combined Application receives a valid objection, the Combined Application and objection will proceed to a contested case proceeding pursuant to Title 2 Chapter 4 Part 6, MCA, and § 85-2-309, MCA. If valid objections to a combined application are received and withdrawn with stipulated conditions and the department preliminarily determined to grant the combined application, the department will grant the combined application subject to conditions necessary to satisfy applicable criteria based on the preliminary determination.

DATED this 10th day of March 2021.

/original signed by Kerri Strasheim/
Kerri Strasheim, Manager
Bozeman Water Resources Regional Office
Department of Natural Resources and Conservation

CERTIFICATE OF SERVICE

This certifies that a true and correct copy of the PRELIMINARY DETERMINATION TO GRANT was served upon all parties listed below on this 10th day of March 2021, by first class United States mail.

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